Bringing Excellence To Substance Abuse Services in Rural And Frontier America Technical Assistance Publication (TAP) Series 20

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Foreword

The 1996 Award for Excellence papers are a culmination of the third Call for Papers from the Center for Substance Abuse Treatment (CSAT) and the National Rural Institute on Alcohol and Drug Abuse (NRIADA). The Call for Papers recognizes that States and counties in rural and frontier areas face special challenges in providing their citizens with adequate services and skilled treatment providers. These challenges call for innovative, unusual strategies and approaches and, in this current period of State health care reform, for solutions designed to work in rural areas (with 50 or fewer people per square mile) and frontier counties (with 6 or fewer people per square mile). In addition to describing the initiative, strategy, or program in depth, authors responding to the Call for Papers were asked to discuss problems and barriers that were encountered.

The papers that are published here offer a compelling look at a number of ways in which rural and frontier America is addressing alcohol and other drug abuse and the problems that accompany the abuse. Recognizing the efforts of AOD experts, caregivers, and communities in rural and frontier areas is one important goal of the Award for Excellence. Representatives of CSAT and NRIADA presented awards to the authors of the first, second, and third place papers at the National Rural Institute on Alcohol and Drug Abuse held in Eau Claire, Wisconsin in June 1996. David M. Paschane accepted the first place award for "Drug Use, Sexually Transmitted Diseases, and SexRelated Risk Behaviors in Alaska," which he wrote with Henry H. Cagle, Andrea M. Fenaughty, and Dennis G. Fisher. The second place award was presented to Boyd D. Sharp, Rodney (Roadrunner) Clarke, and Richard Pohl for their paper, "In Rural and Frontier America, It Takes a Whole Community to Rehabilitate a Substance Abusing Criminal." The third place award was accepted by Wayne Dougherty on behalf of Catherine E. Bartels, author of "Continuum of Services for Offenders in South Dakota." The awardees discussed their programs in workshops held at the Institute.

The Award for Excellence also brings recognition to other programs. The Ten Sleep, Wyoming community/school program, described in this volume, received an outstanding program award from NRIADA. Steve Sohm, who wrote "Prevention and Intervention Substance Abuse Programs in the Ten Sleep, Wyoming, School" accepted the award for Ten Sleep. Jim Armstrong of Bullhead City, who wrote about that community's strategies for building rural coalitions and networks in the 1994 Award for Excellence publication, received a community award at the Institute. Recognition of the accomplishments of the programs and strategies described in the Award for Excellence papers continues with the publication of these papers.

Communicating the ideas behind successful frontier and rural initiatives is the major focus of the Award for Excellence. Communication and access to treatment have traditionally been problematic in areas where populations are widely dispersed and hard to reach. Some of the Award for Excellence papers are beginning to reflect what may be a partial answer to these problems.

Some experts in rural areas believe that telecommunications technologies are key to resolving problems of access and fostering development in rural areas. According to a recent General Accounting Office report (*Rural Development: Steps Towards Realizing the Potential of Telecommunications Technologies*, GAO/RCED96155, June 1996), advanced telecommunications technologies—the Internet, videoconferencing, and highspeed data transmission—offer rural areas the opportunity to overcome their geographic isolation, take advantage of expertise in other communities, improve medical services, create new jobs, and improve access to education. The opportunities provided by these new technologies are also beginning to have an impact on the delivery of substance abuse services, as is reflected in some of the papers offered here.

For instance, Angeline Bushy notes the availability of peer support, consultation services, and educational courses via electronic media to rural service providers. She cites collaborative efforts between educational institutions and health care agencies made possible by the new technology. As described by Paul Higbee and Ernest Bantam, the Black Hills Careers Academy in South Dakota, a school for rural youth whose lives have been disrupted by substance abuse, encourages students to use the Internet to broaden their view of who they are and to explore potential careers. Kathryn Puskar and her colleagues describe a system in which rural school personnel could transmit data to a university computer for analysis.

In these rapidly changing times of health care reform, and the adjustments that Federal, State, county, and local jurisdictions are making in their delivery of substance abuse services, exploring new ways of communicating about and delivering AOD care makes a great deal of sense. Telecommunications technologies are one avenue for exploration. The papers presented here offer other avenues for thoughtful exploration of techniques that may be useful to communities searching for approaches to the problems associated with AOD use. Working in partnership together, we believe that we will successfully address the complex problems that we face.

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Guide to Bringing Excellence to Substance Abuse Services in Rural and Frontier America

The "Guide to Bringing Excelence to Substance Abuse Services in Rural and Frontier America" could not be suitably transferred electronically. To obtain a copy of this guide, you can order this TAP by contacting the National Clearinghouse for Alcohol and Drug Information (NCADI), (800) 729-6686 or by accessing http://www.health.org/pubs/catalog/orderFrm.htm
The reference number for this TAP is BKD220.

Drug Use, Sexually Transmitted Diseases, and Sex-Related Risk Behaviors in Alaska

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Abstract

The association between illicit drug use and sexually transmitted diseases (STDs) is well established in the literature; however, little is known about the networks of disease transmission among rural drug using populations. This paper explores issues related to STD risk among hidden, drug using populations. A structured interview was administered to 1,088 out-of-treatment, drug using adults. The sample included a large proportion of Alaska Natives and American Indians. Several descriptive statistics illustrate associations between sex-related risk behaviors, drug use, and disease transmission. Treating self-reported history of gonorrhea infection as a possible indirect indicator of STD/HIV risk, predictors of infection were identified through logistic regression modeling. The characteristics of drug users most likely to have reported gonorrhea infection were (a) a history of snorting or injecting cocaine, (b) income from prostitution, (c) being black as compared with being non-black, (d) a history of using nonheroin opiates, and (e) being in a younger age group. The model also included an interaction between prostitution and age. This paper includes a discussion of issues related to barriers to treatment and rural-urban mobility.

Alaska, the northernmost territory in the United States, with a population density of one person per square mile, has characteristics that are common to many other rural States (Cordes 1989). Alaska has a stressed primary economic base, underdeveloped infrastructure for accessing health care, and many isolated communities. Hence, delivery of health services and the operation of research in Alaska is challenging. Anchorage, Alaska's largest metropolitan area, is a centralized source of health care and other human services, as well as free shelter and food for a large disenfranchised population. As a result, Anchorage attracts populations migrating from rural Alaska. Seasonal employment opportunities and the centralization of service-oriented jobs also contribute to the high levels of migration. In addition, Anchorage attracts those populations seeking to purchase drugs or participate in drug-related activities (e.g., prostitution). These conditions, plus the necessary resources required for effective research, suggest Anchorage as an opportune and cost effective place to sample Alaskan drug users.

Drug abuse and its contribution to diseases is a growing concern in rural communities throughout the United States. Diseases associated with illicit drug use, such as AIDS and other sexually transmitted diseases (STDs), have stimulated health professionals' interest in implementing prevention models among drug using populations. Injection drug users (IDUs) have been

commonly recognized for contributing to the spread of hepatitis and HIV. In a collection of ethnographic studies, Ratner (1993) describes the relationship between trading sex for drugs or money and smoking cocaine (i.e., crack; Ouellet et al. in press), and illustrates the potential risk of disease transmission where drug use and sex behaviors are combined. Other factors contributing to HIV/STD risk, besides an increase in the number of sex partners, are genital ulcer disease caused by an earlier STD (Chirgwin et al. 1991), genital tissue damage (e.g., penile abrasion), and ulcers in the mouth from cocaine smoking burns (Ratner). The levels of risk for STDs at locations where cocaine smokers trade sex have been equated with risk in the gay bathhouses of the past (Goldsmith 1988).

STDs are among the most common infectious diseases (CDC 1994), affecting more than 13 million adults in the United States (NIAID 1992). These contribute to a sizable morbidity and mortality, place a significant burden on medical services, and have an estimated annual cost of \$5 billion (NIAID). The decreases of screening resources in the United States (Yankauer 1994) may further complicate the burden of STDs for rural populations because of barriers to health care access (Steel and Haverkos 1992). Additionally, drug users may be at a greater disadvantage because of individual resistance to access services if they fear disclosure and consequences for their drug using behaviors (Haverkos 1991). These conditions mean that better targeting schemes are necessary when attempting to control the prevalence of diseases among high-risk populations. Watters (1993) recommends targeted sampling of the noninstitutionalized hidden populations in order to provide information leading to indicators of infection rates and behavioral risks associated with STDs.

Alaska has a unique history of STDs. They were an important cause of illness and sterility as early as the 1700s, when they were first introduced to the Native populations by Europeans (Fortuine 1989). The earliest reports of a behavioral association with STDs are alcohol consumption and sex-related risk behaviors (Fortuine). Historically, gonorrhea (GC) rates have been an important surrogate indicator of HIV risk and other STDs in Alaska. Because chlamydia is not a reportable disease and syphilis rates (1.34 per 100,000) are too low to be reliable indicators, GC rates are the most reliable long-term indicators of unsafe sexual behavior. Twenty years ago, Alaska's GC rates were the highest in the Nation (Eisenberg and Wiesner 1976). These rates have since declined and are now similar to other rural States where GC is below the national objective of the Centers for Disease Control and Prevention (CDC 1994). However, the incidence of GC is high among some groups in Alaska. In 1993, a total of 676 cases of GC were reported with an overall rate of 115 per 100,000; highest rates were among 15- to 19-year-old women, 834 per 100,000; and blacks, 894 per 100,000 (State of Alaska HIV Prevention Planning Group 1995).

The potential for reinfection makes GC fundamentally different from most other bacterial STDs. Some factors contributing to the prevalence of GC are (a) the host's lack of acquired immunity, (b) the potential for asymptomatic infection, and (c) its unique biological makeup (Bignell 1994). Asymptomatic-infected persons are believed to contribute disproportionately to the perpetuation of GC (Upchurch et al. 1990). Moreover, the dramatic increases of penicillin-resistant strains occurring in many regions of the United States may increase the rates of GC prevalence (CDC 1994; Gorwitz et al. 1993; Handsfield et al. 1989). Beller et al. (1992) found that nearly 34 percent of the multiple GC infections in Alaska were among a core group of infected individuals.

The existence of a core group may suggest a network of disease transmission among a specific population not easily recognized by traditional surveillance methods.

Behavioral characteristics have been reported to be associated with GC (Beller et al. 1992; Handsfield, et al. 1989; Schwarcz et al. 1992; Upchurch et al. 1990) and other STDs (Booth et al. 1993; Chirgwin et al. 1991; Kim et al. 1993; Marx et al. 1991; Richert et al. 1993). The behaviors associated with STD acquisition can be both direct (e.g., deliberate unprotected sexual contact) and indirect (e.g., drug use leading to unprotected sexual contact). The relationship between drug use and sexual behavior is often due to the context in which drugs are obtained and the extent of the drug user's perceived need; that is, a compulsive urgency for those drugs and willingness to take greater sexual risk (Ratner 1993; Zinberg 1984). At this time, there is little known about these behaviors and their relationship to diseases in Alaska. Even though Alaskans have long had a reputation for high alcohol consumption rates, the high rates of drug use have been underreported (Fisher and Booker 1990), and even less is known about the networks of disease transmission among these drug users.

Haverkos (1991) argues that the integration of drug abuse and STD treatments would improve the effectiveness of public health interventions directed at controlling STDs. Support for this argument has been tested by clinical trials among intravenous drug users (Umbricht-Schneiter et al. 1994). The overall purpose of this study was to describe those factors that may better explain the networks of disease transmission among rural drug using populations. This required an illustration of associations between sex-related risk behaviors, drug use, and disease transmission. Even though clinical and surveillance data are normally a primary source of STD information, neither source of data reflects the correlates of STDs as they are found among specific high-risk populations (Anderson et al. 1994). In addition to the associations, a risk profile for a possible indirect indicator of high-risk behaviors (i.e., GC) will be modeled for the purpose of better describing the subgroup of the population most responsible for the disease network (Yorke et al. 1978) in a transitional rural population. Because of GC's epidemiological nature, it is an appropriate indicator and allows for such exploratory modeling and targeting of a high-risk hidden population.

Method

This research is part of a longitudinal, multisite study of out-of-treatment cocaine smokers and injection drug users at risk for HIV acquisition and transmission. The National Institute on Drug Abuse Cooperative Agreement for AIDS Community-Based Outreach/Intervention Research Program is designed to assess the efficacy of a locally developed enhanced intervention compared with a standardized intervention for HIV risk reduction. Participant recruitment for this study was guided by a targeted sampling plan based on Watters and Biernacki (1989).

All research activities occurred in an office-based setting, the Drug Abuse Research Field Station. Participants provided informed consent under a Federal Certificate of Confidentiality and received monetary compensation for their time in research. Individuals eligible for research participation were at least 18 years old and self-reported (a) no drug treatment in the preceding 30 days, (b) injecting heroin, non-heroin opiates, cocaine, or amphetamines, and presented needle track marks indicative of recent injection drug use, or (c) cocaine smoking and produced

positive urinalysis for cocaine metabolites. Participants routinely received urinalysis screening for cocaine metabolites, morphine, and amphetamines (Abusescreen ONTRAK; Roche Diagnostic Systems, Montclaire, NJ).

Data in this study are cross-sectional, with participant recruitment and data collection beginning in November 1991 and ending in August 1995. Dependent and independent (predictor) variables were drawn from the Risk Behavior Assessment (RBA) (National Institute on Drug Abuse 1991). The RBA is a structured interview that elicits demographic, alcohol and illicit drug use, drug treatment, sexual behavior, health, criminal activity, and income information. Most of the RBA questions are phrased to use a time reference of the last 30 days, followed by lifetime, the last 48 hours, and the last year. History of sexually transmitted disease is assessed by responses to two items: (a) the number of times participants report being told by a doctor or nurse that they had the specific STD, and (b) the year they report last being treated. The RBA has good test-retest reliability on the drug use and sexual behavior variables (Fisher et al. 1993b; Needle et al. 1995) and high validity coefficients on the drug use variables (Dowling-Guyer et al. 1994; Weatherby et al. 1994).

All scientifically relevant RBA variables were considered for analysis. For the purpose of these analyses, some recoding of the variables was necessary. Categorical variables were either dummy coded or coded dichotomously; continuous variables were maintained, but those with skewed distributions were coded dichotomously. Statistical tests that were applied to the data included: (a) Student's t test, (b) Pearson chi-square, (c) categorical modeling analysis, (d) ordinal logistic regression analysis, and (e) a binary response exploratory logistic regression analysis. All analyses were performed using the SAS System (SAS Institute Inc. 1990). Logistic regression model building and regression diagnostics were performed using techniques developed by Hosmer and Lemeshow (1989).

Barriers

There are a number of common criticisms of self-reported survey data: (a) underreporting due to asymptomatic infections, (b) unwillingness to discuss sensitive subject matter, and (c) inability to recall disease information provided by a medical provider (Anderson et al. 1994). However, clinical studies and surveillance data rarely include assessments of risk behaviors. The outcome variable in this study is self-reported history of STDs, and this may introduce undesirable measurement error to the model. Reliability of self-report is believed to be high when the RBA instrument is utilized (see Method). The validity of self-reported hepatitis infection has been investigated (Fisher et al. 1996), and findings suggest underreporting. The same problem may be present for other infections.

In order to minimize the effect of misreporting specific STDs, responses to number of times participants reported being told by a doctor or nurse they had an STD (i.e., gonorrhea, syphilis, genital warts, chlamydia, and genital herpes), including hepatitis B, were aggregated. The data were recoded because of the nonnormality of the distributions. The resulting variable had three categories: (a) no history of STDs, (b) history of one STD, and (c) history of multiple STDs. Drug- and sex-related risk behaviors having occurred 30 days preceding the interview were defined as recent behaviors. Drug use was categorized as those who only injected drugs, those

who only smoked cocaine, and those who did both. Earlier studies have demonstrated high validity on drug use variables (see Method). The sex-related risk behavior variable consisted of four categories: (a) traded sex for drugs or money, (b) traded drugs or money for sex, (c) participated in both items a and b, and (d) did not participate in either item a or b. Utilizing the Dowling-Guyer et al. (1994) data, separate reliability analyses were performed on the GC variable. Test-retest reliability coefficients for number of times (r = .94; n = 222) and year treated (r = .93; n = 64) were both substantial. Test-retest reliability analyses were also conducted by gender. Among women, reliability coefficients for number of times (r = .95; n = 57) and year treated (r = .99; n = 15) were only slightly greater than those for number of times (r = .94; n = 164) and year treated (r = .91; n = 48) for men. For logistic regression modeling, GC was recoded as "ever" or "never" because of similar use of the variable in previous research (Kim et al. 1993; Schwarcz et al. 1992; Upchurch et al. 1990).

Many of the methodological recommendations identified by Marx et al. (1991) in their review of studies reporting associations between sex, drugs, and STDs risk (e.g., comparison to uninfected group, specification of drugs used, nonminorities, and rural populations) are addressed in this study. Due to overall sample size, model replication could not be attempted within this sample; therefore, it is recommended that similar modeling be attempted using other samples of drug users.

Findings

The study sample (N = 1,088) consisted of 740 men (68 percent) and 348 women (32 percent). The mean age was 35.1 years (SD = 7.6) for men and 32.8 years (SD = 7.4) for women, t(1,086) = 4.71, p < .0001. A summary of selected characteristics of the study sample is included in table 1. More whites (43 percent) participated than other race groups; however, a greater proportion of blacks (31 percent) and American Indians/Alaska Natives (AI/ANs; 20 percent) participated than are represented in the Municipality of Anchorage, 6 percent each (Municipality of Anchorage, Community Planning and Development Department 1993). A majority of participants were not homeless (82 percent) and described themselves as heterosexual (93 percent). Levels of education are distributed almost evenly over these categories: (a) less than high school (36 percent), (b) high school or its equivalent (35 percent), and (c) greater than high school (29 percent). The most frequently reported STD was GC (36 percent), followed by hepatitis B (15 percent), chlamydia (14 percent), genital warts (10 percent), syphilis (5 percent) and genital herpes (5 percent). Perceived risk for HIV infection (n = 1,046) was skewed toward none to some chance, with only 27 percent perceiving themselves having half or a high chance of infection.

Table 1. Demographic characteristics of drug users in Alaska (N=1,088)				
Characteristics		n	Percent	
Ethnicity	White	470	43	
	Black	339	31	

	AI/AN	222	20
	Hispanic	24	2
	Other	33	3
Homeless		196	18
Education (years)	<12	397	36
	12	381	35
	>12	310	29

Note: AI/AN refers to American Indian/Alaska Native

Table 2 contains a summary of drug use and sex-related risk behaviors by history of total number of STDs. Results of the multivariate categorical modeling utilizing the weighted-least-squares analyses indicated that the main effects were significant for both the trading variable, c2 (6, N = 1,088) = 55.89, p < .001, and the drug using variable, c2 (4, N = 1,088) = 16.54, p < .01; however, the interaction parameter was not significant. The reduced model excluded the interaction term.

Table 2. Drug Use and sex-related risk behaviors by history of sexually transmitted diseases among Alaskan drug users (N=1,088)						
	No STD (n=492)				Multiple STDs (n=328)	
	n	%	n	%	n	%
Drug Use						
Inject	21	4	21	8	23	7
Smoke Cocaine	375	76	174	65	214	65
Both	96	20	73	27	91	28
						•
Total	492	100	268	100	328	100
Sex-related risk behaviors						
Trade sex	47	10	38	14	81	25
Trade money/drugs	133	27	72	27	98	30
Both	26	5	13	5	30	9
No trading	286	58	145	54	119	36

Total	492	100	268	100	328	100
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Among the 12 possible risk categories (i.e., the interaction between trading behaviors and drug using behaviors), the largest proportions were among those with a history of no STDs and history of multiple STDs. Fifty-six percent of those who did not trade and reported smoking cocaine only (n = 408), and 48 percent of those who traded only money/drugs for sex and only smoked cocaine (n = 194), reported histories of no STDs. Fifty-seven percent of participants who traded sex, smoked cocaine, and injected drugs (n = 38), and 49 percent of those who traded sex, traded money/ drugs for sex, and only smoked cocaine (n = 39), and 47 percent of those who traded sex and only smoked cocaine (n = 122) reported histories of multiple STDs.

The most parsimonious ordinal logistic regression model of risk factors, where all three levels of the response variable (history of STDs) are represented, retained two significant risk categories (i.e., trading behavior by drug use) and one protective factor: (a) traded sex, smoked cocaine, and injected drugs (OR = 2.67; CI = 1.41, 5.05), (b) traded sex, and only smoked cocaine (OR = 1.73; CI = 1.20, 2.50), and (c) did not trade, and reported smoking cocaine only (OR = 0.53; CI = 0.41, 0.68). Results of the analysis are reported in table 3. The effects of the combined behaviors multiply the odds ratio for either of the comparisons of the combined response variables represented by Constant A (multiple STDs versus one and no STD) and Constant B (multiple and one STDs versus no STDs).

Table 3. Ordinal logistic regression n	nodel for predictin Alaskan drug user (N=1,088)	-	nsmitted	diseases among
Factor	ß	SE(B)	OR	95% CI
Constant A	-0.73***	0.09		
Constant B	0.35***	0.08		
Trade sex, inject, smoke cocaine	0.98**	0.32	2.67	1.41, 5.05
Trade sex, smoke cocaine	0.55**	0.19	1.73	1.20, 2.50
No trade, smoke cocaine	-0.64***	0.13	0.53	0.41, 0.68
	**p<.01. ** SE=standard CI=confiden	d error; OR=	odds ratio	o;

Results of the exploratory logistic regression analysis modeling predictors of GC infection are presented in table 4. Risk factors for GC were (a) a history of snorting or injecting cocaine (OR = 2.31; CI = 1.20, 4.43), (b) income from prostitution, (c) being black as compared with being non-black (OR = 1.79; CI = 1.34, 2.40), (d) a history of using other opiates (OR = 1.55; CI = 1.18, 2.03), and (e) being in a younger age group. Table 5 shows the interaction of age with income from prostitution; presented are the odds ratios for having income from prostitution. The Hosmer-Lemeshow goodness-of-fit tests (Hosmer and Lemeshow 1989), c2 (8) = 8.16, p = .42, demonstrated adequate model fit.

Table 4. Logistic regression model for predicting gonorrhea among Alaskan drug users (N=1,083)							
Factor	ß	SE(B)	OR	95% CI			
Constant	-3.19	0.45					
Cocaine (snort, inject)	0.84	0.33	2.31	1.20, 4.43			
Blacks	0.58	0.15	1.79	1.34, 2.40			
Opiates (non-heroin)	0.44	0.14	1.55	1.18, 2.03			
Prostitution	4.45	1.47					
Age	0.05	0.01					
Prostitution x Age	011	0.05					

Note: Change in N due to missing observations. See Table 5 for estimated odds ratios and 95 percent confidence intervals for prostitution, controlling for age.

OR=odds ratio; CI=confidence interval.

Age	OR	95% CI
20 years old	9.36	2.81, 31.15
30 years old	3.10	1.75, 5.50
40 years old	1.03	0.43, 2.46
50 years old	0.34	0.06, 1.79

Note. Odds are the ratio of the odds of gonorrhea infection among those reporting income from prostitution, to the odds of gonorrhea infection among those reporting not receiving income from prostitution (age is set to four levels). Change in N is due to missing observations.

OR=odds ratio; CI=confidence interval.

Conclusions

Results confirmed prior hypotheses that associations exist between sex-related risk behaviors, drug use, and STDs in rural populations (Forney et al. 1992; Steel and Haverkos 1992; Thomas et al. 1995). In this case, a history of multiple STDs was best predicted by those who engaged in trading sex for drugs or money and smoked cocaine. Cocaine smokers who did not trade sex for money or drugs were more likely than any other group to have reported no STDs. Almost half of those who were trading money/drugs for sex and smoking cocaine had no STDs. These findings suggest that although drug users are commonly considered at high risk for STDs, not all drug users represent the core group perpetuating STDs in a given rural population. Accurate identification of those most likely to represent the source of STDs and diseases spread through

injection drug use can make targeted interventions most effective. The associations described herein illustrate the several possible profiles for STDs within drug using populations. Trading sex for money or for drugs was a component of both groups with significant odds ratios for multiple STDs. The two groups each smoked cocaine; one also injected drugs. These findings support Ratner (1993), in that trading sex and smoking cocaine is the most significant risk combination for STDs. Even though half of those who smoked cocaine, traded sex, and purchased sex with money or drugs (n = 39) reported multiple STDs, this group was not a significant predictor in ordinal modeling. This would suggest that at least half of this group, who have resources to both sell and buy sex, also have characteristics that reduce risk status.

Prostitution, especially among AI/ANs, has received little attention in Alaska. This may be due to the belief that high-risk sexual behaviors (i.e., prostitution) are primarily a characteristic of urban populations (Forney et al. 1992). In addition, rural populations are stereotypically thought of as members of isolated communities where trading sex is not relied upon for economic survival. Anchorage attracts many AI/ANs seeking treatment and assistance resources, and they may be at risk of separation from their traditional community norms that prevent further risk behaviors. The AI/AN women in this cohort often report multiple sex partners, unsafe sex practices, and high-risk drug using behaviors (Fenaughty et al. 1994; Fisher et al. 1993a). Recent reports found that among a sample of drug using women, AI/ANs were more than two and a half times likely to have had GC (Paschane et al. in press) and nearly two times more likely to have had chlamydia (Orr et al. 1995). Conway et al. (1992) describe a potential diffusion of HIV and STDs into rural populations of AI/ANs and suggest this may be due to regular migration between rural and urban areas.

The predictors identified in the GC model better define the hidden, high-risk population for STDs. The model includes two factors often reported in the literature, being black compared with other race groups (Kim et al. 1993; Upchurch et al. 1990), and a history of cocaine use (Marx et al. 1991; Schwarcz et al. 1992). Being black, as a risk factor for GC, agrees with surveillance data in Alaska where GC infection rates among blacks are highest (see the Introduction). Gershman and Rolfs (1991) suggest that race may be a surrogate marker for high-risk behavior, and if race is better defined (i.e., cofactors are identified), it may further describe the core group. A history of using non-heroin opiates has been reported to be associated with ethnicity (whites compared to blacks and Al/ANs; Cagle et al. 1996), infection with hepatitis B (Kuhrt-Hunstiger and Fisher 1994), and a history of chlamydia infection (Orr et al. 1995). The presence of non-heroin opiate use in the model may account for those non-blacks with a history of GC. More research is needed to explain the association between non-heroin opiate use, and risk for GC.

The interaction between age and income from prostitution is an interesting risk factor and may further explain the findings presented in this paper. If individuals who are trading sex for drugs or money and smoking cocaine are most likely to have had multiple STDs, then the age distribution of this population may further explain the disease network. The odds ratios illustrate the interaction by considering risk from prostitution at four age levels. The youngest age group of 20 years is more than nine times as likely to have had GC. Such a dramatic ratio of the odds between those reporting income from prostitution, and those who did not, suggest that this sex-related risk behavior may best define the core risk group in a rural population. These findings are

further supported by the surveillance data reporting 15- to 19-year-old women as having one of the highest rates of GC in Alaska (see the Introduction).

Surprisingly, the pattern is contrary to the expected condition in which older age would be associated with history of GC because of the greater opportunity to contract the disease; however, this may also illustrate risk behaviors unique to younger sex-workers. Koester and Schwartz (1993) report that condom use was least among women trading sex directly for smokable cocaine versus women who traded sex for money. This same group may experience a number of conditions that increase their risk for multiple STDs, such as decreased power for negotiating safe sex practices (Worth 1989), being homeless (Zhao et al. 1995; Paschane et al. in press), and being poorly educated (Zhao et al.). Because asymptomatic-infected persons are believed to contribute disproportionately to the perpetuation of GC (Upchurch et al. 1990), it is possible that the non-drug users who purchase sex from the younger sex-workers may become infected, remain asymptomatic, and unknowingly transmit STDs to other members of the non-drug using population. Whether being older is a protective factor among prostitutes (OR = 0.34) is unclear and may require further investigation.

The models reported here better describe risk factors for GC and multiple STDs in a sample commonly believed to be at high risk for HIV and other STDs. Having unique risk profiles for GC may benefit public health professionals developing HIV/STD interventions in Alaska and other rural States. Future studies should investigate the strength of these associations in describing the populations of other rural areas. Such research may provide additional insights into the prevention of disease transmission where characteristics of populations vary. Two issues relevant to the control of STDs in rural areas are rural-urban mobility as it applies to disease prevalence and barriers to treatment services that control disease.

Haverkos (1991) contends that the integration of drug and STD services will best serve the public health need to control the ever-increasing rates of STDs and drug use. Rural locations, where resources are even more limited than their urban counterparts, can benefit from effective integration of services. The resistance that individuals may have to access services where they fear disclosure and consequences for their drug using behaviors (Haverkos 1991) may worsen the effects of these public health burdens. Barriers to treatment services (Steel and Haverkos 1992) are a reality for drug users in Alaska (Johnson et al. 1995). Common treatment barriers reported by Johnson et al. are excessive cost, lack of availability, inaccessible location, nonculturally relevant programs, and lack of child services. Service integration may help to better overcome some of these barriers experienced by drug users. A subgroup described at even more risk is those with psychiatric illness other than drug or alcohol use (Johnson et al.). In cases in which individuals are less able to make decisions regarding their welfare, mental health agencies, in cooperation with drug treatment centers, may help overcome this barrier to treatment.

As mentioned earlier, migration from rural communities to urban centers for accessing treatment, is, for some individuals, the only choice when services are centralized and local services are inadequate. Recent reports have recognized a significant amount of migration to Anchorage by AI/AN women (Fisher et al. 1993a; Fogel-Chance 1993; Hamilton and Seyfrit 1994). It is unclear what effect migration has on STD/HIV risk; however, other data suggest that behavioral

trends among AI/ANs are leading to destructive outcomes. For example, the highest rates of suicide are among AI/AN men (Berman and Leask 1994), and a majority of those are intoxicated at time of death (Soule 1994). Fisher et al. (1995) also report a number of significant high-risk behaviors among AI/AN women that may be due to the effects of migration. Williams et al. (1993) suggest that travel patterns among drug users may increase the HIV risk to other populations (e.g., rural, non-drug users). Because rural areas contain seasonal employment and subsistence opportunities and most health and human services are centralized, migration is likely to continue in this population.

Recommendations

This study illustrates findings that are useful for developing targeting schemes for STD/HIV interventions. As budget reductions continue (Yankauer 1994), effective management of diseases requires accurate identification of core risk groups. For example, interventions are often designed for the purpose of serving those individuals most likely to seek treatment rather than the populations practicing high-risk behaviors. As a result, members of core groups responsible for the prevalence of STDs may not receive the treatment and counseling necessary for controlling further transmissions of the disease. One way to improve the likelihood of treatment among these high-risk populations is to plan coordinated referrals for treatment among public service agencies. If agencies are better equipped to make active referrals and have the opportunity to recognize the high-risk individuals, they can improve the likelihood of STD control. Future alterations to intervention programs should target the high-risk rural populations and find means of improving their access to testing and treatment.

A number of changes have been made to local STD/HIV screening and treatment services in an effort to reduce the STDs in this study population. A public health nurse (M.A. Lee, personal communication, February 8, 1996) and an HIV outreach worker (M.R. Covone, personal communication, February 8 1996) have attended social gatherings where members of high-risk populations are known to congregate (i.e., bars, massage parlors, the bus station) and performed HIV testing and risk reduction education. Peer outreach appears to be most effective; however, language barriers exist and may be addressed by including outreach workers with appropriate language skills. The most difficult group of drug users to screen for STDs, and at greatest risk as illustrated by these data, are those trading sex for drugs or money. This group may participate in sex-related risk behaviors during hours that cause them to sleep during the day and reduce the likelihood of accessing services during the same hours of operation. A mobile testing unit (e.g., van) operating during an evening shift may best improve access to testing for this high-risk group. Again, effective peer outreach is necessary because of the possible negative effect drug use may have in facilitating cooperation with these clients. Women trading sex are easier than men to target because they are more likely to walk the streets or work at massage parlors; men trading sex are more difficult to target because of lack of visibility. Further studies are necessary for identifying means of improving outreach to this population.

References

Anderson, J.E.; McCormick, L.; and Fichtner, R. Factors associated with self-reported STDs: Data from a national survey. *Sexually Transmitted Diseases* 21:303-308, 1994.

Beller, M.; Middaugh, J.; Gellin, B.; and Ingle, D. The contribution of reinfection to gonorrhea incidence in Alaska, 1983 to 1987. *Sexually Transmitted Diseases* 19:41-46, 1992.

Berman, M., and Leask, L. Violent death in Alaska: Who is most likely to die? *Alaska Review of Social and Economic Conditions* 29:1-12, 1994.

Bignell C. The eradication of gonorrhoeae. The British Medical Journal 309:1103-1104, 1994.

Booth, R.E.; Watters, J.K.; and Chitwood, D.D. HIV risk-related sex behaviors among injection drug users, crack smokers, and injection drug users who smoke crack. *American Journal of Public Health* 83:1144-1148, 1993.

Cagle, H.H.; Fisher, D.G.; Fenaughty, A.M.; and Paschane, D.M. "Predicting Recent Injection Drug Use Among Out-of-Treatment Injection Drug Users." Unpublished manuscript, 1996.

Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance*, 1993. Atlanta, GA: Centers for Disease Control and Prevention, 1994.

Chirgwin, K.; DeHovitz, J.A.; Dillon, S.; and McCormack, W.M. HIV infection, genital ulcer disease, and crack cocaine use among patients attending a clinic for sexually transmitted diseases. *American Journal of Public Health* 81:1576-1579, 1991.

Conway, G.A.; Ambrose, T.J.; Chase, E.; Hooper, E.Y.; Helgerson, S.D.; Johannes, P.; Epstein, M.R.; McRae, B.A.; Munn, V.P.; Keevama, L.; Raymond, S.A.; Schable, C.A.; Satten, G.A.; Petersen, L.R.; and Dondero, T.J. HIV infection in American Indians and Alaska Natives: Surveys in the Indian Health Service. *Journal of Acquired Immune Deficiency Syndromes* 5:803-809, 1992.

Cords, S.M. The changing rural environment and the relationship between health services and rural development. *Health Services Research* 23:757-784, 1989.

Dowling-Guyer, S.; Johnson, M.E.; Fisher, D.G.; Needle, R.; Watters, J.; Anderson, M.; Williams, M.; Kotranski, L.; Booth, R.; Rhodes, F.; Weatherby, N.; Estada, A.L.; Fleming, D.; Deren, S.; and Tortu, S. Reliability of drug users' self-reported HIV risk behaviors and validity of self-reported recent drug use. *Assessment* 1:383-392, 1994.

Eisenberg, M., and Wiesner, P.J. Reporting and treating gonorrhea: Results of a statewide survey in Alaska. *Journal of the American Venereal Disease Association* 3:79-83, 1976.

Fenaughty, A.M.; Fisher, D.G.; MacKinnon, D.P.; Wilson, P.J.; and Cagle, H.H. Predictors of condom use among Alaskan Native, white, and black drug users in Alaska. *Arctic Medical Research* 53:704-711, 1994.

- Fisher, D.G.; and Booker, J.M. Drug abuse in Alaska: Myths versus reality. *Psychology of Addictive Behaviors* 4(1):2-5, 1990.
- Fisher, D.G.; Cagle, H.H.; Davis, D.C.; Fenaughty, A.M.; Kuhrt-Hunstiger, T.I.; and Fison, S.R. Health consequences of illicit drug use in rural areas: Questions without answers. In: Robertson, E., ed. *Rural Substance Abuse: State of Knowledge and Issues*. Washington, DC: U.S. Govt. Print. Off., 1996. pp. 1-37.
- Fisher, D.G.; Cagle, H.H.; and Wilson, P.J. Drug use and HIV risk in Alaska Natives. *Drugs and Society* 7:107-117, 1993a.
- Fisher, D.G.; Fenaughty, A.M.; and Paschane, D.M. Alaska Native drug users: Results of a five-year study. *Abstracts of the 123rd Annual Meeting and Exhibition of the American Public Health Association*, San Diego, CA (2005-112), 1995.
- Fisher, D.G.; Needle, R.; Weatherby, N.; Brown, B.; Booth, R.; Williams, M.; et al. Reliability of drug user self-report [Abstract]. *Proceedings of the IXth International Conference on AIDS* 9(2):776, 1993b.
- Fogel-Chance, N. Living in both worlds: "Modernity" and "tradition" among North Slope Inupiaq women in Anchorage. *Arctic Anthropology* 30:94-108, 1993.
- Forney, M.A.; Inciardi, J.A.; and Lockwood, D. Exchanging sex for crack-cocaine: A comparison of women from rural and urban communities. *Journal of Community Health* 17:73-85, 1992.
- Fortuine, R. Chills and fever: Health and diseases in the early history of Alaska. Anchorage: University of Alaska Press, 1989.
- Gershman, K.A., and Rolfs, R.T. Diverging gonorrhea and syphilis trends in the 1980s: Are they real? *American Journal of Public Health* 81:1263-1267, 1991.
- Goldsmith, M.F. Sex tied to drugs = STD spread. *Journal of the American Medical Association* 260:2009, 1988.
- Gorwitz, R.J.; Nakashima, A.K.; Moran, J.S.; and Knapp, J.S. Sentinel surveillance for antimicrobial resistance in *Neisseria gonorrhoeae*—United States, 1988-1991. *Morbidity and Mortality Weekly Report* 42:29-39, 1993.
- Hamilton, L.C., and Seyfrit, C.L. Female flight? Gender balance and outmigration by Native Alaskan villagers. *Arctic Medical Research* 53:189-193, 1994.
- Handsfield, H.H.; Rice, R.J.; Roberts, M.C.; and Holmes, K.K. Localized outbreak of penicillinase-producing Neisseria gonorrhoeae. *Journal of the American Medical Association* 261:2357-2361, 1989.

Haverkos, H.W. Infectious diseases and drug abuse. *Journal of Substance Abuse Treatment* 8:269-275, 1991.

Hosmer, D.W., Jr.; and Lemeshow, S. *Applied Logistic Regression*. New York: John Wiley and Sons, 1989.

Johnson, M.E.; Fisher, D.G.; and Brems, C. "Unmet Treatment Needs of Drug Users in Alaska: Correlates and Societal Costs." Unpublished manuscript, University of Alaska Anchorage, 1995.

Kim, M.Y.; Marmor, M.; Dubin, N.; and Wolfe, H. HIV risk-related sexual behaviors among heterosexuals in New York City: Associations with race, sex, and intravenous drug use. AIDS 7(3):409-414, 1993.

Koester, S.; and Schwartz, J. Crack, gangs, sex, and powerlessness: A view from Denver. In: Ratner, M., ed. *Crack Pipe as Pimp: An Ethnographic Investigation of Sex-for-Crack Exchanges*. New York: Lexington Books, 1993.

Kuhrt-Hunstiger, T.I., and Fisher, D.G. Hepatitis B: How unique is Alaska? *Abstracts of the 122nd Annual Meeting and Exhibition of the American Public Health Association*, Washington, DC (3106-310), 1994.

Marx, R.; Aral, S.O.; Rolfs, R.T.; Sterk, C.E.; and Kahn, J.G. Crack, sex, and STD. *Sexually Transmitted Diseases* 18:92-101, 1991.

Municipality of Anchorage, Community Planning and Development Department. *Anchorage Indicators*. Anchorage, AK: Municipality of Anchorage, 1993.

National Institute of Allergy and Infectious Diseases. *Sexually Transmitted Diseases*. Bethesda, MD: National Institute of Allergy and Infectious Diseases, 1992.

National Institute on Drug Abuse. *Risk Behavior Assessment*. Rockville, MD: National Institute on Drug Abuse (Community Research Branch), 1991.

Needle, R.; Fisher, D.G.; Weatherby, N.; Chitwood, D.; Brown, B.; Cesari, H.; Booth, R.; Williams, M.L.; Watters, J.; Andersen, M.; and Braunstein, M. Reliability of self-reported HIV risk behaviors of drug users. *Psychology of Addictive Behaviors* 9:242-250, 1995.

Orr, S.M.; Fenaughty, A.M.; and Fisher, D.G. Predictors of Chlamydia trachomatis infection in Alaskan drug users. *Abstracts of the 123rd Annual Meeting and Exhibition of the American Public Health Association*, San Diego, CA (3004-291), 1995.

Ouellet, L.; Cagle, H.H.; and Fisher, D.G. "Crack" versus "rock" cocaine: The importance of local drug nomenclature in research and education. *Contemporary Drug Problems*, in press.

Paschane, D.M.; Cagle, H.H.; Fenaughty, A.M.; and Fisher, D.G. Gender differences in risk factors for gonorrhea among Alaskan drug users. *Women and Health*, in press.

Ratner, M. Sex, drugs, and public policy: Studying and understanding the sex-for-crack phenomenon. In: Ratner, M., ed. Crack Pipe as Pimp: *An Ethnographic Investigation of Sex-for-Crack Exchanges*. New York: Lexington Books, 1993.

Richert, C.A.; Peterman, T.A.; Zaidi, A.A.; Ransom, R.L.; Wroten, J.E.; and Witte, J.J. A method for identifying persons at high risk for sexually transmitted infections: Opportunity for targeting intervention. *American Journal of Public Health* 83:520-524, 1993.

SAS Institute Inc. SAS/STAT User's Guide, Version 6. 4th ed. Cary, NC: SAS Institute, 1990.

Schwarcz, S.K.; Bolan, G.A.; Fullilove, M.; McCright, J.; Fullilove, R.; Kohn, R.; and Rolfs, R.T. Crack cocaine and the exchange of sex for money or drugs. *Sexually Transmitted Diseases* 19:7-13, 1992.

Soule, S. *Individual, Community, and Agency Responsibility for the Prevention of Suicide.* Division of Mental Health and Developmental Disabilities, Department of Health and Social Services, State of Alaska, 1994.

State of Alaska HIV Prevention Planning Group. *HIV Prevention Plan*. Anchorage, AK: State of Alaska HIV Prevention Planning Group, 1995.

Steel, E., and Haverkos, H. AIDS and drug abuse in rural America. *The Journal of Rural Health* 8:70-73, 1992.

Thomas, J.C.; Kulik, A.L.; and Schoenbach, V.J. Syphilis in the South: Rural rates surpass urban rates in North Carolina. *American Journal of Public Health* 85:1119-1122, 1995.

Umbricht-Schneiter, A.; Ginn, D.H.; Pabst, K.M.; and Bigelow, G.E. Providing medical care to methadone clinic patients: Referral vs. on-site care. *American Journal of Public Health* 84:207-210, 1994.

Upchurch, D.M.; Brady, W.E.; Reichart, C.A.; and Hook, E.W., III. Behavioral contributions to acquisition of gonorrhea in patients attending an inner city sexually transmitted disease clinic. *Journal of Infectious Diseases* 161:938-941, 1990.

Watters, J.K. The significance of sampling and understanding hidden populations. *Drugs and Society* 7:13-21, 1993.

Watters, J., and Biernacki, P. Targeted sampling: Options for the study of hidden populations. *Social Problems* 36:416-430, 1989.

Weatherby, N.L.; Needle, R.; Cesari, H.; Booth, R.; McCoy, C.B.; Watters, J.K.; Williams, M.; and Chitwood, D.D. Validity of self-reported drug use among injection drug users and crack cocaine users recruited through street outreach. *Evaluation and Program Planning* 17:347-355, 1994.

Williams, M.L.; McCoy, C.B.; Menon, R.; and Khoury, E.L. Mobility as a factor in the spread of HIV among intravenous drug abusers. In: Brown, B.S., and Beschner, G.M., eds. *Handbook on Risk of AIDS*. Westport, CN: Greenwood Press, 1993.

Worth, D. Sexual decision-making and AIDS: Why condom promotion among vulnerable women is likely to fail. *Studies in Family Planning* 20:297-307, 1989.

Yankauer, A. Sexually transmitted diseases: A neglected public health priority. *American Journal of Public Health* 84:1894-1897, 1994.

Yorke, J.A.; Hethcote, H.W.; and Nold, A. Dynamics and control of the transmission of gonorrhea. *Sexually Transmitted Diseases* 5:51-56, 1978.

Zhao, Z.; Williams, M.; Rusek, R.; Wild, J.; and Freeman, R. Sexual risk profiles of crack using female sexual partners of injection drug users. *Abstracts of the 123rd Annual Meeting and Exhibition of the American Public Health Association*, San Diego, CA (3003-290), 1995.

Zinberg, N.E. Drug, Set, and Setting: *The Basis for Controlled Intoxicant Use*. New Haven: Yale University Press, 1995.

In Rural and Frontier America, It Takes a Whole Community To Habilitate a Substance Abusing Criminal

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Abstract

This paper consists of three major parts. The first describes the treatment obstacles faced by substance abuse treatment providers and criminal justice system personnel in a small Oregon town. To overcome these obstacles, they created a network aimed at reducing substance abuse and drug-related crime by chronic repeat offenders. The coalition was successful in securing a CSAT grant to address this population, beginning a drug court program, assisting in developing a jail program, and is now being included in countywide criminal justice planning. The second part describes the CSAT funded project they created to fight substance abuse and crime. The project's treatment model is an intensive, outpatient, antisocial therapeutic community emphasizing the

cognitive approach of Yochelson and Samenow. The third part presents data suggesting that the model created is effective at reducing arrests. In fact, arrest rates of clients in the program 9 months or more fell 88 percent from what they were in the 3 months before program entry. The reduced arrest rate was not caused by attrition of clients with the most severe alcohol/substance abuse problems. Over two-thirds of clients had lower arrest rates after they entered the program than before they entered it. The reductions in arrest rates increased the longer the clients were in the program. These results suggest that the Consortium model is effective on an outpatient basis.

This paper first describes the process by which the Klamath County Treatment and Correctional Providers Consortium was developed, including the research into the repeat offender problem in Klamath County. Second, from a therapy/corrective perspective, we outline implementation of an outpatient program for chronic nonincarcerated repeat offenders who have substance abuse problems. We describe the major components of treatment in this program, which is known as the Consortium treatment program. Third, we examine outcome studies and the latest demographic data on Consortium clients from an evaluative perspective.

Consortium Program Development

Background

Klamath County, in Southern Oregon, covers an area of 8,000 square miles of high desert and mountainous terrain. The population density is approximately nine persons per square mile, and agriculture and timber are the major industries. The rural community of Klamath Falls is the economic hub of the county. There are approximately 18,000 residents within the city limits, an additional 20,000 residents within the adjacent urban growth boundary, and 10,000 residents in outlying areas, for a total of 48,000 residents in the county. The primary minority populations are Native Americans and Hispanics, each comprising 5 percent of the county's population.

History

In the fall of 1991, an auspicious staff meeting of probation and parole officers employed by the Klamath County Department of Corrections took place. During the course of the meeting, Jackquelyn Hoffmann, a nurse employed by the sheriff's office at the Klamath County Jail, presented some astonishing and disconcerting information. Jacki presented statistics on repeat offenders arrested five or more times since establishment of a new local jail in the fall of 1989.

The statistics Jacki presented made it quite clear that an overwhelming proportion of local crime was being committed by the repeat offender population. The growing population of repeat offenders was exacting a disproportionate local cost in terms of personal and property damage, while causing social costs through creating an atmosphere of fear, concern, and frustration among local residents. Additionally, the sheer magnitude of the level and frequency of arrests was adding financial burdens to local government at all levels of operations of the criminal justice system, including investigation, arrest, prosecution, incarceration, and supervision.

Several difficulties in addressing the social and financial costs created by repeat offenders were discussed during the course of the corrections staff meeting. First, the State of Oregon had placed severe restrictions on the ability of probation and parole officers to send our clients to prison. In addition, due to severe financial difficulties of county government, the sheriff's office had lost approximately 40 percent of its active officers due to layoffs. Among the consequences of the layoffs and reduction in budget was the loss of two-thirds of the operating capacity of the local jail. Only one of the three jail pods was open, and a revolving door situation reflected our local inability to hold offenders for significant periods of time.

The consensus of the corrections staff was that more than 90 percent of the identified repeat offenders had histories of drug and/or alcohol abuse and/or dependence. Local financial capacities to treat these offenders were inadequate to cover more than one-quarter of actual treatment costs for corrections clients. There was complete agreement regarding the social and financial impact of the repeat offender population, the lack of adequate sanction capacity through either prison or jail incarceration, and the inadequacy of treatment resources. Discussions turned to possible solutions. Rodney (Roadrunner) Clarke, a Klamath tribal drug and alcohol program director, suggested, and parole officers and the agency director, Chuck Edson, agreed, to begin a cooperative effort to engage in the planning, community organizing, and fundraising necessary to address the repeat offender problem.

Chuck Edson enlisted the local sheriff's office and jail representation. Rod Clarke involved Stepping Stones, Lutheran Family Services, Consejos, and the other local treatment programs, as well as the County Department of Mental Health.

Jan Kelley, Stepping Stones planner, attended a regional workshop on new Center for Substance Abuse Treatment funds and reported her findings back to our planning group. CSAT funding appeared to be available and appropriate to our plans. For a full year, our coalition met at least monthly to discuss and plan a project intended to:

- Positively impact the target repeat offender population through treatment
- Improve local sanctioning capacities, especially at the county jail
- Increase funding to local treatment providers to enhance their capacity to treat the target population.

We followed our principles in planning the project. Although we could have designed program delivery to award the lion's share of funding to the four treatment providers involved in the planning, instead, we decided after analysis and discussion that a new and separate program with its own staff to focus on the target population would be more likely to be effective than would referrals to our own agencies. We designed our treatment program accordingly, providing the opportunity only for the providers to contract to perform group therapy.

A team of Consortium members traveled to Salem, Oregon for the first CSAT workshop on their new funding. We were pleased to discover that we appeared to be the embodiment of the community partnership model supported by CSAT policy and philosophy. However, we were surprised and disappointed to find that CSAT had made a change in programming and would no longer be accepting applications for projects at local jails outside Target Cities project sites.

We returned and called a Consortium meeting to discuss the situation and reconsider our direction. Captain Linville of the sheriff's office encouraged us to apply for a CSAT grant even though there would no longer be any financial benefit to the jail operation from a prospective grant. As a result, we developed a consensus to accelerate the frequency and duration of our planning meetings, targeting CSAT as a funding source to develop outpatient rather than incarcerated treatment for the target population.

Various proposal components were assigned to Coalition members, drafted, and brought back for discussion. Jan Kelley took the completed components and developed our actual proposal to CSAT. Ultimately, it was reported to us that CSAT received 198 proposals and funded a total of 13. We also found out that our proposal was reviewed favorably at CSAT. As a small rural community, with a diverse planning group involving the Hispanic and Klamath Tribal communities, as well as other established agencies and departments, we were and are very proud of our sustained planning efforts and proposal success.

After receiving our notice of award, the Coalition formally organized through the efforts of our membership as a nonprofit corporation. We applied for and received corporate status from the State of Oregon as the Klamath County Treatment and Correctional Providers Consortium, also referred to as The Consortium. We promptly filed for and received 501(c)(3) status as a charitable organization from the Internal Revenue Service.

Other Coalition Benefits

The Consortium, for nonincarcerated repeat offenders with five or more arrests, funded federally through the Center for Substance Abuse Treatment (CSAT), is the first project initiated by our broader local consortium of providers, criminal justice participants, and lay people. Of note is that the original long-term planning engaged in by the coalition participants has had significant and substantial additional benefits for our community.

As stated, one of the key original purposes of the coalition was the critical need to supplement jail operations capacities. Primarily through the efforts of Chuck Edson, the Klamath County Jail is now a regional facility funded in part by the financial contributions of departments of corrections from adjoining counties. A jail that once operated at one-third capacity now operates at two-thirds capacity or better.

Local coalition building and planning has also now become part of the fabric of our community. Klamath County Commissioners have formally appointed local individuals to a Criminal Justice Planning Committee as well as to a local Public Safety Planning Council. Both entities do comprehensive planning on behalf of local government, and both include many individuals from our original coalition. Treatment providers are now part of the criminal justice system, with treatment providers playing a central role in policy development. In the past, providers were included in such groupings and activities as an afterthought, if considered at all.

Finally, our coalition is gradually but constantly growing, to the benefit of our community as a whole. For example, local judges have recently become part of the loop by providing leadership and facilitating the development and implementation of a drug court out of local resources. The

ripple effect of having cast our concerns into a pond of previous indifference is fully expected to continue. As with our Consortium treatment program, we expect to continue to improve the conditions and quality of life in our community through planning that follows our principles and coordinated, concerted, and comprehensive efforts.

Program Implementation

Beginning the Program

During the period between the grant's approval and the start of funding, a major destructive earthquake, 5.9 on the Richter scale with the epicenter about 15 miles from Klamath Falls, occurred. It eliminated the proposed physical location. As a result of the earthquake, the program lost the in-kind use of a county facility. The county courthouse was closed due to earthquake damage, and county departments immediately took up virtually all available space, a total of at least 30,000 square feet. Loss of the county facility forced staff and Consortium members to spend considerable time locating a building to house the project. This added \$15,000 to \$20,000 to the cost of the project. We are currently located downtown in a remodeled old office building.

Just as critically as the physical damage that it inflicted, the earthquake affected the psychological condition of the community. Worry and concern over personal impact was devastating to many. Recovery within the greater community was slow. The physical acts necessary in tearing down blocks of buildings and the emotional reminders of damaged buildings not yet torn down also had an impact on the community. Although an earthquake affects any community, in a rural and frontier area any major disaster touches practically every citizen because of the interrelatedness evident in rural and frontier communities.

The first executive director was hired in February of 1994, with other staff subsequently hired. There were delays in developing contracts between the County of Klamath, the State of Oregon, and the Board of Directors, which were needed to make CSAT funds available to the project. These delays cost the program a good 5 months of operation. In addition to the above, the first executive director resigned in September 1994 and the present director was not hired until December, causing further delay.

In this environment, trying to continue the original excitement, cooperation, and progress was difficult. The entire implementation process was relegated to a snail's pace. Nevertheless the commitment, dedication, and earnest efforts of the Board of Directors, the staff, and the community officials functioning as supporters was unwavering.

A clear outcome of the grant was furthering a team/community sense of purpose in the treatment and correctional personnel who had contact with the project staff. The grant served as a breath of fresh air in a professional community racked by budget cuts, personnel layoffs, and resource depletion. The sense of innovation and the rejuvenation produced by professional recognition of the problem in the community combined to involve and motivate the staff of the numerous agencies connected to the project. Given the overall attitude of this community, this has been a very noteworthy and positive outcome.

Program Description Revisited

The Project's ability to make an impact in Klamath County increased immensely with the hiring of a new executive director who had previous experience in developing and supervising a successful 50-bed alcohol and drug therapeutic community in a similar rural environment (Powder River Correctional Facility in Baker, Oregon).1 His arrival increased the possibility of developing a model that satisfactorily treats the nonincarcerated offender and reduces his or her reoffense rate, which in turn would reduce the overall crime rate in Klamath Falls.

Beginning on December 5, 1995, the program initiated a number of changes that improved program accountability and progress toward program goals. The project seriously reevaluated the initial program design. A move toward an antisocial treatment model, as opposed to a prosocial treatment model, was made. This model is described in Bush and Bilodean (1993), and Sharp and Beam (1995). The Hazelden's Design for Living series, which is designed to specifically address the offender population, was incorporated into the program format. Also incorporated was Yochelson and Samenow's Thinking Error material as a major portion of the program (Yochelson and Samenow 1976, 1977, 1986).

Antisocial Treatment Model

The program employs a cognitive-behavioral approach that includes strict use of sanctions for program rule violations, cognitive restructuring of criminal thought patterns, and a therapeutic community. The antisocial treatment model embraces (among other things) the belief that criminals commit crimes because their thinking rationalizes, justifies, and excuses their behavior. Criminal behavior is the result of erroneous thinking. The "criminal thinking" component is the therapeutic heart of the program. It is examined and addressed in all group and individual sessions and activities.

The program model avoids causation issues. Criminal acts are acts of choice. Each client in the program made individual choices to get where he or she is. The choice of whether to benefit from the program is the client's alone, too. The client is asked to take responsibility for his or her thinking, and the optimum opportunity for success in the program requires that the client be held accountable for all of his or her actions, past, present, and future.

Thus, for a client to take responsibility for his or her thinking and behavior, it is important for that client to admit that he or she is a criminal. The word "criminal" is used the same as the word "alcoholic." The alcoholic must admit and accept that he or she is an alcoholic in order to begin recovery. We believe the criminal must also admit and accept the fact that he or she is a criminal in order to begin recovery.

Dual Track

As the program developed, it was clear that a dual track, not envisioned in the grant application, was necessary. There were many clients who were working or going to school in the daytime. For them to participate in treatment, an evening track was therefore necessary. The program is now open from 7:00 a.m. to 11:00 p.m. Monday through Friday. This allows a day reporting/ day

treatment program as envisioned by the grant and also the ability to accommodate clients in an evening program. Thus we have parallel programs, one for day clients and one for evening clients. A benefit of parallel programs is that it allows clients from each track to make up sessions in the other track. All in all, the program seems to be strengthened by the parallel tracks.

Therapeutic Community

The program is structured in an attempt to develop an outpatient therapeutic community that provides a variety of opportunities for practicing personal growth and change, including both individual and group settings. The therapeutic community (TC) can be distinguished from other major drug treatment settings in two basic ways. First, the primary "therapist" and teacher in the TC is the group of people in treatment itself, including peers and staff, who as role models of successful personal change, serve as guides in the recovery process. Second, unlike other programs, the TC offers a more systematic approach to achieve its main objectives. In the case of the Consortium, this objective is to help clients stop using alcohol and drugs, and to stop committing crimes and hurting people.

A therapeutic community is a positive environment where people who have similar problems, such as criminality and alcohol and drug abuse, live and work together to better their lives. The structure of such a community is set up like a large family. Staff and all its service providers represent the parent or authority figures. The program follows a chain of command, in which all participants strive to earn better privileges, jobs, and status within the community and its level system. In order to demonstrate positive growth and change, the resident moves up the ladder or chain of command by complying with the rules, attending on a consistent basis, participating in all program activities and doing any and all current jobs well. Peers and staff work together to help all clients achieve these objectives. This may include clients addressing issues with clients in groups and other sessions to hold one another accountable for these goals on a community and on an individual basis. The new program format was initiated on February 27, 1995.

Community Training

Prior to the initiation of the program, a 2-day training, "Treatment Perspectives on Criminal Personalities," was held. All Consortium staff and 57 people from mental health, alcohol and drug programs, the Oregon Institute of Technology College, Parole/Probation, the jail, the medical community, Klamath Tribal Health, and other organizations attended. The training provided, for the first time, a clear definition of how the program was to work. It also gave staff and the other area providers a clear picture of the difference between prosocial and antisocial treatment modalities.

Removing Barriers To Treatment

The program removes as many barriers to treatment as possible. Clients are often released from jail without adequate housing, utilities, food resources, or clothing. They sometimes come to treatment with medical problems and prescriptions that they need to fill. Arranging affordable and adequate child care is often difficult for this clientele. Clients often can only find housing so far away as to make walking impossible, and most have had their driver's licenses revoked,

which creates transportation problems. These social and financial circumstances create barriers to treatment. A client benefit fund was created to provide limited term financial assistance to clients who face these barriers when entering treatment. Programs that are designed to be an enhancement to treatment have been developed to address the clients' housing, clothing, transportation, child care, and medical needs.

The Consortium believes that proper diet is important to the treatment process and recognizes that clients may not always have food. Accordingly, the Consortium developed a program to provide food at the treatment center. Clients are provided with breakfast, lunch, an evening meal, and snacks.

Parole Officer

A parole/probation officer was hired by the Klamath County Community Corrections
Department using State dollars and the dollars in the Consortium grant budget authorized for a
parole/probation officer. The officer is assigned to the Consortium. This allows the project to
have the officer full time and dedicate the officer's time to the clients initially admitted into the
Consortium. The officer tracks the client, makes home visits, administers sanctions, etc. The
initial few weeks of treatment are critical to engaging and retaining the correctional client. The
officer's assistance enhances these first weeks and the delivery of service by the project. With the
parole officer and a solid relationship with Parole and Probation, client participation and
accountability have risen dramatically. The parole officer allows quicker enforcement of
sanctions against clients for noncompliance. Clients receive the message that they will be held
accountable for their actions. Without the immediate sanctions, an outpatient program for
chronic nonincarcerated repeat offenders is impractical.

Linkages

The program has actively attempted to establish or improve community linkages with organizations such as Partnership for Drug Free Klamath County, Klamath County Corrections, Klamath County Court system, and other AOD treatment providers. It is represented at several statewide organizations (Oregon Institute for Addiction Studies, Northwest Frontier Addiction Training Centerùa CSAT funded project, and Drug Abuse Program Directors Association of Oregon). The program has membership in local committees pursuing the possibility of bringing a drug court program to Klamath County, in helping to reestablish a detoxification center coupled with a sobering station, and in determining the future direction of corrections services in Klamath County.

Evaluation Findings

Data Collection System

The Addiction Severity Index (ASI) was chosen as the data collection instrument for the project. It is a 161-item multidimensional clinical and research instrument for diagnostic evaluation and for assessment of change in client status and treatment outcome. It assesses seven life problems

areas. They are: (1) medical status, (2) employment/support status, (3) drug/alcohol use, (4) legal status, (5) family history and relationships, (6) social relationships, and (7) psychiatric status.

Computer software in the form of the Easy-ASI and Easy-Track was obtained from QuickStart Systems, Inc. to analyze data produced by the ASI. This software allows compilation of more than 400 reports, completion of the quarterly report, evaluation of the project, pre/post evaluations, and a 5-page evaluation narrative on each client.

The software has been enhanced by our administrative supervisor. The reporting functions of the Easy-Track and Easy-ASI have been modified to print data reports (demographics, client status, etc.) specific to the needs of our agency, as well as adding several "user definable" fields to help capture other data relevant to our agency. Another enhancement has been the utilization of the dBase IV database package in tandem with the Easy Track/ASI software. Through the dBase software, we track individual client activities while in treatment, and group data (number of clients attending, average attendance across quarter, week, and month, etc.).

Evaluation Procedures and Studies

Program staff meet weekly with a member of the evaluation team. The evaluation team works closely with the project to determine the most appropriate data to be collected to ensure that the goals and objective of the project are being met as well as being sensitive to additional areas that could properly be evaluated by the work this project is accomplishing.

Several evaluative studies have been accomplished during the first 2 years of the project. They include:

- A client profile
- A community survey
- Arrest data
- Program performance data

We will detail only three of these. Because of the relatively short duration of the project, the numbers are small in most of the samples. However, they seem to indicate that the program is making an impact on reducing the arrest rates of the clients.

We examined client profiles of all 112 clients admitted during the second year of the program's operation on 18 variables. ASIs were first administered June 1, 1995, and thus were only given to the last 62 clients admitted to the program. Data on these clients are presented in table 1.

Table 1. Client characteristics

Drug		60% amphetamine	
Progran	m	40% day	
Marital	status	11% m, 536% ds	
Work		32% f, 26% p, 36% u	
Race		87% white	
Gender		69% male	
Age		31.4	
Educati	on (mos.)	135.3	
Prior al	cohol treatment (no.)	2.43	
Prior drug treatment (no.)		2.59	
Income/month		\$243.11	
ASI sco	res		
	Alcohol severity	5.40	
	Drug severity	7.55	
	Employment severity	5.35	
	Family severity	5.08	
	Legal severity	6.31	
	Medical severity	1.79	
	Psychiatric severity	3.46	

m=married; **ds**=divorced/single; **f**=full time; **p**=part time; **u**=unemployed.

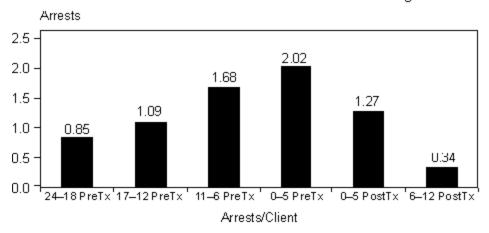
Consortium clients are mostly white, male amphetamine abusers. Although most clients are male, the Consortium admits a higher percentage of women than exists in the target population. Clients average slightly over an 11th grade education and are rarely married. Amphetamine is often manufactured locally; Klamath Falls is a manufacturing center for it. The high levels of amphetamine abuse suggest that Consortium clients have been involved in drug trade. This conjecture is supported by the low legal monthly earnings of clients.

We studied arrest records of all 47 Consortium clients who had been in the program for at least 3 months as of December 1, 1995. We began 2 years before program entry, and followed them from that point until December 1, 1995. In the 2 years prior to program entry, arrest rates increased steadily. For all 47 clients, arrest rates were down 33 percent from what they were before program entry. Arrest rates of clients in the program 9 months or more fell 88 percent from what they were in the 3 months before program entry. The reduced arrest rate was not caused by attrition of clients with the most severe alcohol/substance abuse problems. Over two-thirds of clients had lower arrest rates after they entered the program than before they entered it. The reductions in arrest rates increased the longer the clients were in the program. These results suggest that the Consortium model is effective on an outpatient basis. Data on changes in arrest rates are presented in table 2 and figure 1.

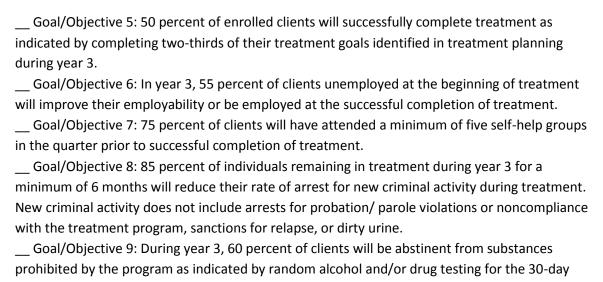
Table 2. Arrest rates

	3-5 mo. Tx	6-8 mo. Tx	9 mo. + Tx
No. of clients	23	10	14
Total Klamath Falls arrests at admission	11.08	12.1	10.86
Arrest rate before entry	1.34	1.57	1.41
Arrest rate after entry	1.14	1.53	0.55
Percentage of decrease in arrest rate	15%	3%	61%
Percentage of clients with lower rate	43%	80%	86%

Figure 1. Effect of Treatment on arrest rates
Pretreatment vs. Posttreatment (after treatment began)



We also conducted a study on the extent to which the first 18 clients, in the program for 6 months, had met goals for individual clients established in the grant. These goals are:



of treatment.

__ Goal/Objective 10: 60 percent of clients remaining in treatment for a minimum of 6 months will report progress toward meeting the goals identified in their initial assessment/evaluation and/or treatment planning.

period prior to the termination of their probation or parole status and/or successful completion

Although the numbers in this study are small, the results are encouraging. All six goals were exceeded by percentages ranging from 8 percent to 34 percent (see figure 2).

Percent 100 89 80 60 60 55 50 40 20 Ο 6 9 8 Goal/Objective ☐ Met goal Target

Figure 2. Clients meeting their goals

Recommendations

After considering our experiences we would like to make the following recommendations to criminal justice and treatment provider personnel in rural areas.

First, for progress in treating criminal substance abusers, the first step is often simply collection of data documenting the extent of the problem. Without the efforts of the jail nurse, Jacki Hoffman, in this area, we never would have made an impact. Efforts to obtain funds to make progress must often begin with data collection.

Second, in small rural towns sufficient expertise to make progress exists, but it is likely to be split among criminal justice and substance abuse providers working for many different organizations. For us, and very likely for many rural areas, only coalitions that bring together these organizations are likely to have the resources to succeed. Such coalitions can also succeed in many other rural areas.

Third, sufficient cooperation can be achieved among these diverse organizations to make progress if members of these organizations are willing to devote the time (for us it was several years) and put aside short-term personal goals. While this was difficult for us, we all feel the effort was well worthwhile. You will also.

Fourth, chronic repeat offenders require an intensive, consistent, antisocial treatment model to be successful. It was difficult for many treatment providers to consider our antisocial model, and difficult to staff it in a small town. Nonetheless, with sufficient patience and attention to selling the need for this approach, we were able to do it. You will be also.

Fifth, the evaluation MIS and the evaluation as a whole required close contact between evaluation staff and program people. For example, when we tried implementing the computer system using a contractor from out of town, the system did not work. After we went to a local contractor, the system caught up rapidly. The local contractor was simply able to be around more

when he needed to be. Our evaluation worked best when the evaluation staff was part of the treatment team and the treatment team was part of the evaluation staff.

Sixth, a parole officer assigned to the program is essential to ensure that sanctions are applied consistently and immediately.

References

Bush, J.M., and Bilodeau, B. Options: *A Cognitive Change Program.* Washington, DC: U.S. Navy and the National Institute of Corrections, U.S. Department of Justice, 1993.

The Hazelden Foundation. *Design for Living (The Hazelden Substance Abuse Curriculum for Offenders)*. Center City, MN: The Hazelden Foundation, 1992.

Sharp, B.D., and Beam, K.J. Treatment perspectives on criminal personalities in a rural setting. In: Center for Substance Abuse Treatment. *Treating Alcohol and Other Drug Abusers in Rural And Frontier Areas*. Technical Assistance Publication (TAP) Series, No. 17. DHHS Pub. No. (SMA) 95-3054. Rockville, MD: Center for Substance Abuse Treatment, 1995. pp. 93-102.

Yochelson, S., and Samenow, S.E. *The Criminal Personality: A Profile for Change*. Vol. 1. Northvale, NJ: Jason Aronson, 1976.

Yochelson, S., and Samenow, S.E. *The Criminal Personality: The Change Process.* Vol. 2. Northvale, NJ: Jason Aronson, 1977.

Yochelson, S., and Samenow, S.E. *The Criminal Personality: The Drug User.* Vol. 3. Northvale, NJ: Jason Aronson, 1986.

Continuum of Services for Offenders in South Dakota

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Abstract

The South Dakota Corrections Substance Abuse Program, which began in 1988, has grown and evolved to include a full array of chemical dependency services at all adult and juvenile corrections institutions plus referral and collaboration with community-based alcohol/drug agencies for parolees.

The program content for the institutional chemical dependency program is focused on the link between criminal behavior and chemical use, and the program format is specific to offenders.

This program utilizes the cognitive ôCriminal Thought Processö approach in combination with 12-step therapeutic materials.

Chemical dependency services in the three State adult correctional facilities include chemical dependency assessments on all incoming inmates based on DSM-IV criteria; pretreatment services and intensive chemical dependency treatment for those adults who have a chemical dependency diagnosis; relapse prevention; individual counseling; Alcoholics Anonymous and Narcotics Anonymous (AA/NA) opportunities; crisis intervention; referral to community-based programs; and program evaluation and outcome measures.

Chemical dependency services provided in the three State juvenile correctional facilities include all of those listed above for adult programs plus prevention education groups.

In 1988, the South Dakota Department of Corrections determined through the use of chemical dependency assessments conducted with adult inmates, and reviews of adult and juvenile criminal histories, that at least 70 percent of the juveniles and 80 percent of the adults in Department of Corrections facilities had alcohol and other drug problems that were not being addressed. The decision was made by the Department of Corrections to apply to the South Dakota Attorney General's Task Force on Drugs for funding for chemical dependency programming in correctional facilities under the State and Local Law Enforcement Assistance Programs Anti-Drug Abuse Act of 1988. The application for funding was approved, and the program began in 1988.

Since the program began, it has expanded and evolved to provide a continuum of chemical dependency services to adult and juvenile offenders while they are incarcerated and while they are supervised in communities after institutional release. The institutional chemical dependency units, which are all located in South Dakota Department of Corrections facilities, are State-accredited programs staffed by certified chemical dependency counselors who are employees of the State.

During State Fiscal Year 1995, a total of 925 adults and 273 juveniles received chemical dependency assessments in South Dakota correctional facilities. Of these, about 80 percent of the adults and 68 percent of the juveniles had a diagnosis of substance abuse, using DSM-IV criteria. During this same time frame, 428 adults and 154 adolescents completed chemical dependency treatment in correctional institutions. Those who complete these treatment programs are referred to community-based agencies when they exit the institutions.

The three South Dakota institutional chemical dependency programs for adults are located at the South Dakota State Penitentiary in Sioux Falls, the Springfield State Prison, and the Yankton Trusty Unit. The juvenile institutional chemical dependency programs are located at the State Training School in Plankinton, the Youth Forestry Camp in Custer State Park, and the Lamont Youth Development Center located in Redfield. A total of 21 chemical dependency counselors provide a full range of services in these facilities.

Linkages between the institutional programs and community-based agencies and between State entities have been established through interagency agreements and memoranda of understanding so that offenders may be served throughout their involvement with the criminal justice system.

Purpose

The mission of the Corrections Substance Abuse Program is to provide a continuum of quality chemical dependency services to adult and juvenile offenders. This will give them the knowledge and tools to live chemically free lifestyles, which will enhance their opportunity for successful community reintegration following release from custody and/or supervision.

While the programs have changed in many aspects since 1988, the primary goal of providing the appropriate level of service based on detailed assessment data and diagnoses has always been a foremost concern. Another basic tenet of the program has been the recognized need for integration and acceptance of chemical dependency services within each institution. The level of program integration and acceptance is different in each of the facilities based on the level of institutional security needs, the level of other programming available, the institutional organizational hierarchies that are in place, and the physical locations at each facility for substance abuse program provision.

Those adults and juveniles who have received chemical dependency treatment services while they are incarcerated are referred to community-based agencies for continuing care and related services upon institutional release. Adults on parole are supervised by Parole Agents who are employees of the Department of Corrections. Juveniles on aftercare are supervised by Court Services Officers who are employees of the Unified Judicial System. Employees of the institutional chemical dependency programs, Parole Services, Court Services, community-based agencies, and the Division of Alcohol and Drug Abuse have a great deal of contact with each other in order to provide an appropriate level of continuing services to offenders after they leave correctional facilities.

Methods

The following section will describe the methods used to screen, assess, and provide appropriate service delivery to the juveniles and adults in Department of Corrections facilities.

Assessment

A variety of validated screening and assessment tools for juveniles and adults are available and used during the assessment process. Each adult and juvenile inmate completes a battery of written screening and assessment tools and a structured interview that delineates the effects of alcohol and drugs on nine critical life areas. Diagnoses are based on the DSM-IV criteria for substance abuse related disorders. The level and type of institutional services received are based on the results of the assessment, program availability, and length of sentences or parole dates.

Programming

All of the chemical dependency counselors in the Corrections Substance Abuse Program are trained in the cognitive theory based Criminal Thought Process Model, which is integrated with the 12-step based therapeutic model. Abstinence from all mood-altering chemicals and abstinence from criminal behavior are the two key programmatic goals. Issues related to personal responsibility and accountability are at the forefront of programming along with education about the progression of the disease of chemical dependency and the effects of chemical use on self and others.

Approximately 20 percent of the adults and juveniles who receive chemical dependency services in the correctional facilities are Native American. While separate programming for Native Americans is not offered, all of the counselors are trained in issues related to Native American cultural and spiritual values. Most of the counselors have received training in the Red Road approach to chemical dependency treatment for Native Americans, and sweat lodges, pow-wows, and other self-help groups specifically for Native Americans are available at the correctional facilities.

The services offered at each of the Department of Corrections institutional chemical dependency program are described next.

Adult Corrections Substance Abuse Program

South Dakota State Penitentiary

All male adults sentenced to the Department of Corrections receive a chemical dependency assessment as well as medical, mental health, educational, and vocational assessments at the Orientation and Induction Unit of this facility. The inmates who receive chemical dependency treatment services at the penitentiary must be at the minimum custody level before receiving treatment.

All chemical dependency programming at this all-male, multicustody level facility is provided at the West Farm Unit, which is located 12 miles from Sioux Falls. The specific chemical dependency services provided at this unit include pretreatment services and treatment. The inmates who receive these services are housed together at the West Farm and are separated from other inmates. Three chemical dependency counselors provide the services at the West Farm.

The pretreatment program consists of a 24-hour, 4-week educational and group treatment format. Subjects covered include alcohol and drug effects information, the use of criminal thinking errors and tactics to avoid responsibility, and the development of written chemical use and criminal behavior histories. The goal of this program is to help inmates prepare for treatment by decreasing denial and resistance and increasing self-knowledge about the effects of chemical use and criminal activity on their lives.

The intensive treatment program at this facility consists of 72 hours of programming over 6 weeks. The format includes didactic presentations, group therapy, and individual therapy,

combined with Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) attendance. The last 2 weeks of programming are basically devoted to relapse prevention education and the development of individual relapse prevention and aftercare plans.

Springfield State Prison

Springfield State Prison is a medium security coed prison with an emphasis on vocational and chemical dependency programming. The inmates who are involved in chemical dependency programming are housed separately from the general population. Seven chemical dependency counselors provide the treatment services at this unit. The men at this prison receive chemical dependency assessments at the State Penitentiary prior to transfer to Springfield, and the women receive their assessments at Springfield.

A phased treatment program modality is in place at this facility. All inmates with a chemical dependency diagnosis attend a 100-hour, 4-week, basic treatment program that consists of didactic presentations, group therapy, and individual therapy combined with AA/NA attendance. Following completion of this phase, inmates may enter one of three programs depending on an objective assessment of progress during the first phase. Some inmates move directly to the continuing care program, but most enter either the Advanced Treatment or the New Beginnings group. The Advanced Treatment group is designed for those who made progress during the first phase, and the New Beginnings group is for those inmates who are more entrenched in chemical use and criminal thinking.

Yankton Trusty Unit

Chemical dependency pretreatment services and treatment similar to that offered at the South Dakota State Penitentiary are currently available at this minimum security unit. Plans for a 40-bed therapeutic community are developing with a start date scheduled for November 1996. Currently, two counselors provide the chemical dependency services at this unit, and when the new programming begins, another counselor will be added.

Aftercare

All adults who complete treatment at one of the above institutional chemical dependency programs are referred to community-based chemical dependency programs following institutional releases. Funding has been established for community-based chemical dependency aftercare programming for parolees. The community-based services for parolees may include transitional care, custodial care, aftercare groups, family and individual counseling, and case management services in which the parolees, the service providers, and the Parole Agents establish the parole chemical dependency services plan.

Juvenile Corrections Substance Abuse Program

State Training School

A full range of chemical dependency services are available at this 105-bed coed facility for adjudicated juveniles. Five chemical dependency counselors provide the services, which are integrated and coordinated with all other program areas and services at this institution. The institutional therapeutic approach is the Positive Peer Culture, which works well with the model that has been developed for chemical dependency services delivery. The approach integrates the cognitive/behavioral Criminal Thought Process model with a 12-step based practical and philosophical program.

Each new juvenile admitted to this facility has complete chemical dependency assessment, and the services that are provided are based on the results of the assessment. Those who do not have a DSM-IV chemical abuse or dependency diagnosis are referred to the Prevention Education Program. Those who do have a dependency or abuse diagnosis are referred to the Pre-Treatment Program, where issues regarding denial, the effects of chemical use, and criminal activity are addressed. After completing the pretreatment component, these juveniles are referred to the Adolescent Intensive Treatment Program. This 70-hour program consists of educational presentations, group therapy, individual counseling, and AA/NA attendance. Those who complete the treatment program are then referred to the Continuing Care Program, where individual relapse prevention and aftercare plans are developed.

Youth Forestry Camp

This 54-bed all-male correctional facility is located within the Custer State Park. The boys who are in this facility are involved in park maintenance and fire suppression activities as well as school and therapeutic programs. The chemical dependency program components at this facility are very similar to those at the State Training School. Two chemical dependency counselors provide assessments, prevention education, pretreatment services, intensive treatment, and continuing care.

Lamont Youth Development Center

The Lamont Youth Development Center is a 24-bed all-female correctional facility located in Redfield, South Dakota. This program for girls has a full range of chemical dependency services that are similar to those offered at the State Training School and the Youth Forestry Camp. Because this is an all-female facility, additional program activities are provided that are more pertinent to females such as abuse issues, eating disorders and self-image, and co-dependency.

Aftercare

All juveniles who complete the treatment program at one of the three juvenile correctional facilities are referred to community-based alcohol and other drug (AOD) programs for aftercare services. The juveniles are supervised by Court Services Officers following institutional release.

Program Evaluation and Followup

Data Collection

Assessment data for all persons, both youth and adults, who are clients of one of the Corrections Substance Abuse Programs, are collected by three questionnaires. A client's assessment questionnaire, administered at the completion of the treatment program, is used to obtain the client's perception of the usefulness of various aspects of the program. The counselors' assessment of the client's progress is also completed at the conclusion of the treatment program. The records are fairly complete for the client and counselor assessments. The third form administered is a followup form designed to measure client outcomes in the areas of arrests, substance use, work status, educational program attendance, and other progress while on supervision.

The followup information for the youths comes from Court Services Officers after 3 months of probation following discharge from one of the three juvenile corrections programs. Followup information is available on about three-quarters of the youths.

Followup information for adult clients is obtained from parole

officers who supervise former clients of the institutional treatment programs who have been paroled. Information is available on approximately one-half of the former inmates who have completed a substance abuse treatment program while incarcerated. Information is not available on former clients who are directly discharged from the institutions and not placed on parole or who are paroled to other States.

Summary of Basic Findings

The clients give very high ratings to the programs. The clients are especially impressed with the counselors, the group and individual counseling, and the overall program. Overall, about 90 percent of the clients rated important aspects of the program as good or excellent. About 96 percent of the clients who completed the treatment programs indicated that they would recommend the program to other people.

Juvenile Clients

After 3 months of supervision, the youths were found to have an abstinence rate for alcohol of 61.7 percent. The abstinence rate for all substance use of those from the juvenile program was a very respectable 58.9 percent. Alcohol is the main substance of use and abuse of young and old in South Dakota.

About one-half (49 percent) of the juveniles with poor relationships with persons in their homes were arrested while they were on probation, while only 10.2 percent with good relationships were arrested while on probation. Nearly one-half (46.7 percent) of the juveniles with poor progress in academic areas were arrested while they were on probation, while only 6.2 percent with good progress were arrested while they were on probation. More than one-half (52.4 percent) of the juveniles with poor progress in vocational areas were arrested while they were on

probation, while only 6.1 percent with good vocational progress were arrested while on probation.

Adult Clients

After an average of 13.5 months of parole supervision, the former adult clients had an abstinence rate of 58.2 percent for alcohol. The abstinence rate for all substance use of those from the adult programs was 57.7 percent.

Other Findings

Those who attended community-based aftercare and AA/NA were much more likely to have successful outcomes (abstinent, not arrested, did not violate parole, did not abscond) than those who did not take part in these services.

Those with higher levels of education were less likely to be using substances. In general, people with favorable ratings of the institutional treatment program were less likely to violate parole or to be using chemicals following institutional release. Other results demonstrated that those who were working were less likely to violate parole, be arrested, abscond from parole, or use moodaltering chemicals.

Problems Encountered and Solutions

Program Implementation

From the inception of the program, the Secretary of the Department of Corrections was very supportive of chemical dependency services in the correctional institutions. The Secretary fought for the creation of new chemical dependency counselor positions in the department, and she directed that the programs be implemented within the adult and juvenile corrections institutions. In order to decrease administrative functions and consolidate fiscal and programmatic efforts, the employees and the funding for the Corrections Substances Abuse Program moved from the Department of Corrections to the Department of Human Services, Division of Alcohol and Drug Abuse, in August 1995. This decision was made with the approval of the Governor and the Secretaries of the Departments of Human Services and Corrections. This illustrates the point that the success of programming efforts in correctional facilities must have the support of key decisionmakers in order to develop and maintain viability.

Early in the program development and implementation process, a few of the institutional administrators and security staff were not supportive of chemical dependency services. Additionally, institutional educational and vocational program staff were concerned that their time and programming efforts with inmates would be decreased because of the new chemical dependency programming. There was a period of tension, adjustment, and gradual accommodation in all of the institutions as the programs became operational.

Much of the opposition to chemical dependency services diminished as the institutional program and security staff began to realize that inmates were easier to work with and more motivated

after they had completed chemical dependency programming. Chemical dependency counselors now sit on inmate classification boards and disciplinary hearing teams, and provide information to the Parole Board. They also provide preservice training to all new institutional staff on the criminal thought process model and chemical dependency issues so that all employees are familiar with what the program is attempting to accomplish. Inmates who have chemical dependency treatment needs do not move through the prison system until they complete programming, so all employees are working toward assisting inmates achieve the needed level of programming.

Another reason for gradual acceptance of the chemical dependency staff and programming efforts is that a concerted effort has been made to cooperate with other programs and institutional areas such as security, food services, and medical units. The chemical dependency programs have always operated under the caveat that institutional security is a priority and that programming must conform to security needs.

In the juvenile institutions, where there is a greater overall therapeutic emphasis than in the adult institutions, the chemical dependency units are integrated into the facility-wide programming. The chemical dependency counselors are part of the ôtreatment team,ö and the various programs work together and share information freely.

Program Content

Many of the institutional chemical dependency counselors came to the corrections system from community-based programs, where they had infrequent contact with offenders. These counselors implemented the program content and philosophy that they had applied in other settings and were frustrated when they did not obtain similar positive results. In 1992, all of the State corrections chemical dependency counselors attended training provided by Koerner and Fawcett, Inc. on the Criminal Thought Process. The Criminal Thought Process model incorporates material from Stanton Samenow's and Samuel Yochelson's research on criminal personalities. The curriculum offers a practical approach for working with offenders and also incorporates the principles of the 12-Steps Program.5

Since 1992, the Criminal Thought Process has become integrated into all correctional chemical dependency program elements. Many of the counselors have attended additional training, and several have become Corrective Thinking Specialists and are training others in the model. Parole Agents throughout the State have also been trained in the model, and many counselors from community-based agencies have received training. Inmate-facilitated Criminal Thinking self-help groups have begun in the prison system and several inmates have stated that they plan to implement these groups in their communities after institutional release.

Linkages With Other Agencies

When those adults and juveniles who receive chemical dependency treatment in the institutions are released from custody, they are to be referred to community-based agencies for aftercare services. Juveniles are supervised by Court Services Officers following institutional discharge, and adults who are paroled are supervised in the communities by Parole Agents.

In the past, when juveniles were released from correctional institutions and returned to their communities, they often did not contact the community-based agency for aftercare, and the Court Services Officers were often not aware of an individual's failure to attend aftercare sessions. In response to this problem, an interagency agreement was developed between the Department of Corrections, the Department of Human Services, and the Unified Judicial System, which delineated the responsibilities of each agency and the intent that juveniles with a chemical dependency diagnosis who leave correctional institutions under the supervision of the courts will attend community-based aftercare. While this has been a positive step, there still remains more work to be done to keep juveniles involved in chemical dependency services as they make the transition from one agency and program to the next.

In the adult system, many adults on parole also did not receive community-based aftercare services. One reason for this is that there was no funding for the services, and Parole Agents were reluctant to insist that parolees attend aftercare when they could not afford to pay for the service. A pool of money was made available through the Division of Alcohol and Drug Abuse for community-based chemical dependency services for parolees. The State-accredited agency directors who provide the services signed agreements delineating their responsibilities and agreeing to develop programming specifically for offenders. As in the case for juveniles, adults who leave the institutions are not always involved in aftercare when they return to their communities even though funding is now available for the services. More education is needed for Parole Agents on the nature of chemical dependency and the benefits of aftercare. Education is also needed for the community-based agencies on the special characteristics and needs of offenders in order to make the program more widely accepted and utilized.

Summary and Conclusions

A continuum of chemical dependency services has been developed and implemented for chemically dependent adults and juveniles in the South Dakota Department of Corrections facilities. These programs have become specific to serve the characteristics and needs of offenders. Many of these adults and juveniles would require inpatient treatment services if they were not incarcerated because of the severity of their chemical use and their lack of an adequate community support system.

The latest analysis of costs for the program indicates that the per-adult inmate cost of treatment is \$840; the cost for each juvenile to complete treatment is \$960. This is about half of the cost for outpatient treatment in community-based programs and is less than one-sixth of the cost for inpatient treatment in South Dakota.

References

Arbogast, D. Wounded Warriors: A Time for Healing. Omaha, NE: Little Turtle Publications, 1995.

Samenow, S. Inside the Criminal Mind. New York: Times Books, 1984.

Yochelson, S., and Samenow, S.E. The Criminal Personality: A Profile for Change. Vol. 1. Northvale, NJ: Jason Aronson, 1976.

Yochelson, S., and Samenow, S.E. *The Criminal Personality: The Change Process.* Vol. 2. Northvale, NJ: Jason Aronson, 1977.

Yochelson, S., and Samenow, S.E. *The Criminal Personality: The Drug User.* Vol. 3. Northvale, NJ: Jason Aronson, 1986.

Implementing a Family Preservation Services Drug and Alcohol Program in Rural Nevada

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Abstract

This paper presents a description of the Family Preservation Services Drug and Alcohol Program in rural Nevada, which is funded by a National Center on Child Abuse and Neglect Demonstration Project grant. An intensive, home-based services model that serves substance abusing child welfare clients is described. The Project is a collaborative effort involving community health, substance abuse, and child welfare agencies as well as university evaluators. The 17-month grant was awarded in October 1994 and ran through June 1996. Challenges faced in implementing services and noteworthy outcomes are discussed.

In October 1994, Nevada's Division of Child and Family Services received a 17-month service demonstration project grant from the National Center on Child Abuse and Neglect (NCCAN Project) for the addition of family preservation teams specializing in substance abuse issues to three child welfare service sites in rural Nevada. The Project is a collaborative effort involving Division of Child and Family Services, State of Nevada Bureau of Alcohol and Drug Abuse, State of Nevada Bureau of Community Health Nurses, Washoe County Juvenile and Social Services, Washoe County Health District, and the University of Nevada, Reno. This paper presents a description of the NCCAN Project.

Profile of Nevada

Nevada is the Nation's seventh largest state and the fastest growing State in the Nation, increasing in total population from 800,508 in 1980 to 1,463,000 in 1994, a growth rate of 86.5 percent (Nevada Children's Mental Health Plan 1995). Census Bureau statistics indicate that about 66 percent of the State's population live in the Las Vegas area, with an additional 22 percent living 500 miles to the north in the Reno/Carson City area. The remaining 12 percent of the State's population live in about 85 percent of its territory (Commission on Substance Abuse, Education, Prevention, Enforcement and Treatment, 1994-95).

Nevada ranks first in the nation for all age groups in per capita alcohol consumption rate. Nevada is second in the nation in cocaine addiction and wine consumption and leads all Western States in beer consumption. From 1981 through 1986, cirrhosis of the liver deaths ranged from being in 7th to 10th place as the leading cause of death for Nevadans, while substance abuse was ranked as being in 5th to 8th place as the leading cause of death during the same period (Nevada State Bureau of Vital Statistics 1991).

Nevada Child Abuse and Neglect Statistics (1994) notes that in 2,763 substantiated cases, 56.1 percent involved alcohol/drug dependency as a major factor contributing to family stress. This is consistent with the Child Welfare League of America's 1993 study, which indicated that more than 50 percent of Child Protective Services (CPS) cases were related to substance abuse (U.S. Department of Health and Human Services 1994).

Family Preservation Services Specializing in Substance Abuse

Family Preservation Services (FPS) is a program within the Division of Child and Family Services that was initiated in 1988. In 1990, a specialized family preservation team was developed to provide services for children at risk of placement due to their parent's substance abuse. This program, funded by the Nevada Bureau of Alcohol and Drug Abuse, was a collaborative effort between county and State.

The NCCAN Project expands these specialized family preservation services to three additional sites. The sites were chosen based on the lack of home-based substance abuse services, the presence of an existing family preservation program, a willingness to participate in the research component, and site accessibility—that is, located within a reasonable driving distance for the research team.

The Project sites are in rural Nevada, as rural areas have less emergency services available for abuse/neglect victims. Further, children in rural Nevada who are removed from their homes due to abuse or neglect are often placed in out-of-county substitute care due to limited substitute care resources and mental health services in their home counties.

Purpose of the Project

The purpose of the NCCAN Project is to reduce the risk of child abuse/neglect by providing family preservation services to those families with children at imminent risk of out-of-home

placement due to parental substance abuse. Services focus on stabilizing the family, assisting the family to acknowledge and address the risks associated with the parent's substance abuse, and linking the family to ongoing community resources. Status- offending adolescents are included as a target population in this Project, as their status-offending behaviors (truancy, incorrigibility, runaway) are frequently related to abuse and neglect. In addition, these behaviors often place the youth at risk of further abuse and neglect.

The NCCAN service population includes families who meet the following criteria: (1) placement is imminent for at least one child in the family and/or (2) risk of continued serious abuse or neglect is high; (3) the safety of the child can be maintained through the use of family preservation services; (4) the family is willing to participate in these services; and (5) abuse and/or neglect in the family is directly linked to the substance abuse of one or more caretakers in the home.

Program Description

Intensive Home-based Services

The family preservation model was selected as the preferred service delivery approach, as it serves families who often cannot or do not access or utilize more traditional models of service. This model incorporates a non-blaming, competency- based, problem-solving philosophy; intensive, individualized, home-based services; family systems and ecological perspectives; and a focus on providing the ancillary services needed to stabilize the family. Development and implementation of the Project's policies and practices are guided by and measured against the principles of empowerment, family-centered practice, skill- and competency-building, and culturally relevant and community-based practices.

Professional/Paraprofessional Teams

The Project funds three professional/paraprofessional teams. Each site is targeted to serve up to 25 families by the end of the grant period. Each professional/paraprofessional team is made up of a master's level clinician and a family services worker. The team combines expertise in clinical and systems issues and knowledge of community resources.

Each team serves four to five families at a time, depending on service needs and travel demands. The team works intensively with families in their homes for up to 60 days, meeting at least twice a week for 2 hours each visit. After the initial assessment period, the team approach allows the clinician and family service worker the flexibility to meet with the family together to accomplish multiple tasks or to meet with the family at different times to pursue different tasks. The objective is to offer individualized services that include crisis intervention, individual and family therapy, substance abuse intervention, advocacy, education and skill-building, concrete services (such as teaching clients how to access and use public transportation, develop a household budget, and plan and prepare meals), and referral and linkage to community services and resources. Staff are responsive to client scheduling needs, meet with referred clients within 24 hours, and are available for crises 24 hours a day.

To support follow-through to referrals and in response to recommendations arising out of previous NCCAN Service Demonstration Project evaluations, the Project added a 120-day followup service component. Followup services are provided by the family service worker and include support and continued linkage to community resources.

Staff Support

Each Project team was integrated into existing family preservation programs at each site. This offers staff members a larger support system, providing both clinical and peer support. It also allows for resource sharing and builds on already established referral routes and community education regarding family preservation services.

Clinical supervision is structured in a team approach, with Project staff and supervisor meeting in team consultation twice a week. Together they assess and develop plans to address the family's needs within the intensive, time-limited context. Families and staff alike benefit from the shared expertise of team members. Team consultation in Nevada's family preservation programs has been effective in supporting the retention of therapists who work with this high-risk, multiproblem, demanding client population.

Nevada's family preservation programs have tended to draw professionals new to the field who are interested in developing their skills in working with families. To encourage the hiring and retention of mental health professionals, the Division of Child and Family Services considers itself to be in partnership with these professionals, offering an intensive and supportive learning environment in exchange for a 2- to 3-year commitment to the program.

Hiring professionals with limited experience to work with families whose children are at high risk of abuse or neglect presents new challenges for ensuring children's safety and the provision of quality services. The Project's team approach, its frequent case consultations, and the ready availability of its supervisors counter the risks of these challenges. In addition, staff are provided with training pertinent to the targeted service population and the model of service.

Collaboration With Community Health Nurses

The health and nutritional issues associated with substance abuse and child abuse/neglect make for a natural partnership between family preservation workers serving substance abusing families and community health nurses. County and State community health agencies provide in-kind services and consultation to NCCAN Project family preservation clients. This includes training and services in health-related issues for high-risk clients, more specifically, medical indicators of child/abuse neglect, normal growth and development, feeding, resources for health care, signs and symptoms of common childhood illness, and communicable disease control.

In addition, at one site the community health agency accepts followup referrals of Project clients should continued in-home, family support services be needed. This partnership supports the provision of more comprehensive and coordinated services for at-risk children.

Research Description

Formative and summative levels of evaluation are carried out by the School of Social Work at the University of Nevada, Reno, the Project's independent evaluator. The three components—implementation, effectiveness, and impact—involve a variety of research methods and data collection strategies. While data analysis will be conducted by the research team, interpretation of findings will involve a collaborative effort among the researchers, Division of Child and Family Services staff, and Project partners. The evaluation report will be completed in 1996.

Project Implementation

The formative component of the evaluation involves two phases. The first phase consists of descriptive-level research aimed at comparing actual project implementation features with predetermined criteria for success. The second phase of formative research consists of qualitative research aimed at illuminating program successes as well as implementation problems and their resolution. A series of focus groups will be conducted 1 year following the grant award at each of the three Project sites. Focus group participants at each site will include service recipients, Project staff, referring workers, and personnel from collaborating and community resource agencies.

Service Effectiveness

This evaluation will include examination of outcomes based on intake, termination, and 6-month followup data on Project cases, as well as a comparison between outcomes at different program sites and between substance-involved families and those from the regular family preservation program.

The effectiveness of Project services will be determined by the following criteria: (1) avoidance of placement (determined 6 months after termination), (2) reduction in the risk of abuse/neglect (measured by the Family Risk Scales), (3) reduction in symptoms of substance abuse in the caretaker(s) (measured by the chemical dependency portion of the Addiction Severity Index), (4) improvement in family functioning (measured by the Family Satisfaction Index), (5) improvement in child behavior symptoms (measured by the Child Behavior Checklist), and (6) effective linking of substance abusing families with appropriate resources in the community for long-term support and assistance. Perception of helpfulness by participating families will be examined through client interviews.

Project Impact

To address the policy and service integration issues of concern to this Project, a key informant study is planned. In-depth interviews will be conducted with line-level Child Protective Services and probation staff, supervisory and management personnel from referring agencies, and directors from among the collaborating community resource agencies.

The in-depth interviews are expected to yield qualitative data concerning: (1) specific agency policy changes related to substance-abusing clients, (2) specific agency procedure changes related to substance-abusing clients, (3) informal policy (e.g., worker practices) related to substance-abusing clients, (4) changes in worker/manager views concerning family preservation

activities, (5) changes in efforts to collaborate among agencies concerned with substance-abusing families, and (6) proposed legislation related to substance abusing families and family preservation efforts in the State. Data from family interviews outlined under the service effectiveness component of this evaluation plan will be included in the analysis of the program.

Barriers Encountered and Solutions Implemented

Delay in Startup

Startup was delayed for a number of reasons. Nevada's Legislative Interim Finance Committee must approve acceptance of all grant awards. This committee did not meet until 2 months after the notice of award, preventing timely Project implementation. Further, initial plans to house the Project in existing State facilities became untenable due to changes in the needs of other programs. Therefore, office space had to be found, leases had to be approved by Nevada's Board of Examiners, and equipment had to be located and installed.

Another major contributor to a delayed startup was the difficulty in recruiting and hiring staff. Due to the lack of professionals with the needed expertise in Nevada, it was necessary to conduct a national recruitment. Lack of staff and procedural requirements in the State's Personnel Department delayed the recruitment effort and interview process. Once positions were offered, those moving from other States and Canada required from 4 to 6 weeks to relocate.

To compensate for the delay in startup, the Project applied for and received a 4-month extension, until June 1996.

Low Referrals

Referrals have been lower than anticipated at all sites. Given that this is a new service, client recruitment has required continual distribution of information and reminders to referring workers. In addition, at one site, the Project "competes" for referrals due to the concurrent startup of a drug court for parents who have lost custody of their children because of their substance abuse. Referring workers have difficulty determining which is the more appropriate program for their clients, with decisions often left to the presiding judge, who is understandably an advocate for the court's program.

Strategies used to encourage referrals include weekly flyers, monthly meetings with referral agencies, frequent visits to the offices of referring workers, and monthly client status reports. Project staff actively incorporate the referring workers into the treatment process through frequent consultations and joint client sessions when appropriate. This serves to facilitate teaming across agencies. Education in the identification and treatment of substance abuse is also offered to referral agencies. In addition, to counter referring workers' tendency to view the referral criteria as a barrier, site supervisors have become more inclusionary and flexible in their acceptance of referrals.

Staff Retention

The Project has been hampered by multiple staff turnovers due to the time-limited nature of the funding. As the end of the grant period nears, it has become increasingly difficult to retain, recruit, and hire professional staff. This instability in staffing patterns has placed sites behind in meeting their service goals. Extension of the grant by an additional 4 months has been helpful in the hiring of replacement staff and has given sites the opportunity to serve more clients. Also, in an attempt to meet projected service goals, Project referrals are now being served by both regular Family Preservation Services staff and NCCAN staff.

Data Collection

The Federal grant application time frame (approximately 6 weeks) allowed for little involvement of direct service staff in the conceptualization of the research component. This circumstance proved a barrier to the implementation of the evaluation effort. Outcome instruments were selected with the intent of making them useful for practice. However, early feedback suggests that, at best, staff view the instruments neutrally. At worst, they view them as intrusive and inconsistent with the Project's solution-oriented model. Had existing line and supervisory staff been more actively involved in the process of selecting outcome measures for this project, perhaps instruments could have been located with greater perceived clinical utility, thereby enhancing worker competence and, at the same time, improving the reliability of data collection.

To address these concerns, Project supervisors brainstormed and implemented recommendations to improve data collection. These included immediate feedback on instrument data, development of a script for presenting the research component to clients, regular contact with the evaluator, and involvement of staff in discussions of how the research will be useful to practice.

Conclusions and Recommendations

In their analysis of previously funded NCCAN Service Demonstration Projects, evaluators of the Program Lesson Series (U.S. Department of Health and Human Services, Keys to Success 1995) indicate that a 3-year grant period is an insufficient amount of time "to plan, implement, evaluate and institutionalize projects such as these" (p. 13). Instead, they recommend that service demonstration projects have a 5-year time line. The challenges experienced in Nevada's NCCAN Project lend further support to this recommendation.

Further, in the field of family preservation, where the family-centered, strengths- based paradigm is applied, evaluation approaches must mirror practice to be effective. Adopting an ecological perspective and a competence-based, consumer-oriented research strategy that recognizes the respective research partners as equals appears a potentially useful strategy for breaking down traditional barriers in State agency-university collaborations. Workers should be drawn into the process of defining research objectives as early as possible. Their information needs should be considered throughout the conceptualization and design phases of the project. Whenever possible, outcome instruments selected for use in the study should be useful for practice (Bitonti and Salmon 1996).

Despite the difficulties encountered in sustaining this Project, the Project has several outcomes that are noteworthy.

- 1. By Project end, 75 families will receive intensive home-based services. While the evaluation that examines the effectiveness of these services is not yet complete, these intensive, home-based services that were previously unavailable have supported families and child welfare workers by providing another avenue to meet the "reasonable efforts" mandate, which attempts to preserve the child's family. As Azzi-Lessing and Olsen (1996) indicate, family-centered, home-based services fill a gap in the continuum of services for substance abuse-affected families in the child welfare system.
- 2. One of NCCAN's objectives for the Service Demonstration Project was to influence Nevada's planning process for the Family Preservation and Support Program. Project updates were provided at each meeting of the Statewide Steering Committee, which also served as the Project's Advisory Committee. In addition, information from national publications and conferences regarding the needs of this service population and the outcomes of other evaluation efforts were shared. Committee members are aware of the Project's service population, service model, and evaluation efforts. Consequently, the Committee included a longitudinal outcome study of family preservation services in the State's Five-Year Plan.
- 3. Partnerships fostered by this Project have improved the communications and relationships among the State, county, and community agencies involved. Managers and supervisors are sharing information and initiating new partnerships and projects across discipline and agency, particularly related to the overlap of substance abuse and child welfare services. These include collaborations in grant applications, provision of services, research efforts, and regional trainings.

The gains and lessons learned through the NCCAN Project, though hard won, have strengthened the child welfare service delivery infrastructure in rural Nevada. As these services have left their mark on the communities they serve, it is anticipated these communities will seek resources to fill the void resulting from the termination of the Project.

Acknowledgments

NCCAN Project supervisors, Nancy Sirkin, M.S., and Saul Singer, M.S., surveyed referents of their respective programs and provided a summary and interpretation of the responses.

References

Azzi-Lessing, L. and Olsen, L.J. Substance abuse-affected families in the child welfare system: New challenges, new alliances. *Social Work* 41(1):15-23, 1996.

Bitonti, C. and Salmon, J. Evaluating family preservation in Nevada: A university-State agency collaboration. *Family Preservation Journal*, Winter, 1996.

Commission on Substance Abuse, Education, Prevention, Enforcement and Treatment. *Beating Drugs: A Workable Plan for Nevada*. Progress Report, 1994-95.

Nevada Child Abuse and Neglect Statistics. Las Vegas: State of Nevada Division of Child and Family Services, 1994.

Nevada Children's Mental Health Plan. Las Vegas: State of Nevada Division of Child and Family Services, 1995.

U.S. Department of Health and Human Services. Federal Register 59 (83), May 2, 1994.

U.S. Department of Health and Human Services. *Keys to Success: Providing Services to Families With Substance Abuse-Related Child Abuse and Neglect Issues.* The Program Lesson Series. U.S. Department of Health and Human Services, 1995.

Wellness in the Woods—Woodsong, Residential Treatment For Mothers and Their Children

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Abstract

Woodsong is a demonstration grant funded by the Center for Substance Abuse Treatment (CSAT) that provides residential treatment to women and children. It is an addition to the Georgia Pines Community Mental Health, Mental Retardation and Substance Abuse Services (MHMRSA) service delivery system. This program is located in a rural southern environment characterized by low income, high unemployment, and illiteracy. The target population is women primarily addicted to crack cocaine and alcohol. Approximately 70 percent of families served are African American; 30 percent are Anglo American. A special concern is for women who are in imminent danger of losing custody of their children. The women are between 17 and 45 years of age, and the children are between 1 and 10 years of age.

Woodsong has two major goals. The first is to implement an array of culturally relevant services that lay the groundwork for women to adopt a sober, secure, and creative lifestyle and empower children to become self-directed, self-confident, and knowledgeable about addiction. Woodsong's second goal is to empower women and their children to create and embrace healthy, fulfilling relationships. To accomplish these goals, Woodsong provides comprehensive residential services, conducts thorough assessments and evaluations, develops family service plans for each family in residence, conducts an intensive children's program, increases the quality of relationships, and prevents relapse in the target population.

Georgia Pines Community Mental Health, Mental Retardation and Substance Abuse Services is located in a rural southern community encompassing approximately 3,000 square miles,

including 6 counties with 31 towns and a population of approximately 150,000 residents. About 34 percent of the population are African-American, 64 percent are Caucasian and the remainder are Hispanic, Asian American, and Native American. This low-income area has high unemployment, particularly in the African-American population, and a per-household income of only \$12,200. Illiteracy is rampant, with only 43 percent of the population in possession of high school diplomas. Alcohol and cocaine addiction has skyrocketed in this area. A recent study conducted by the State Division of Mental Health, Mental Retardation and Substance Abuse focused on regional cocaine admissions from fiscal year 1984 to fiscal year 1988. The southwest Georgia region had an increase of 4,835 percent, by far the highest increase in the State of Georgia (see figure 1).

Figure 1. Regional cocaine admissions, Georgia FY 1984-FY 1988 E. Central W. Central Northwest Central SOUTHWEST Southeast Northeast 7 Atlanta 1,000 Ο 2,000 3,000 4.000 5,000 Percent increase in cocaine admissions to State-supported programs

Source: Georgia Division of Mental Health, Mental Retardation, and Substance Abuse

Services for individuals with addictive disorders are sparse and, until the advent of Woodsong, resources designed specifically for women and their children were unknown in Georgia.

Purpose

In response to the increasing demand for services for substance using women with children, in 1993 Georgia Pines Community Services applied for and was awarded Federal funds. Woodsong, a CSAT demonstration grant program for residential treatment for women and their children, is an addition to the Georgia Pines continuum of care. The Woodsong target population is women, primarily addicted to cocaine and alcohol, and their children. The majority of the women have intergenerational problems as well as other coexisting conditions that have thwarted their recovery in more traditional treatment settings. Women and their children generally stay in the program from 9 to 12 months. Woodsong has two primary goals: first, to implement an array of culturally relevant services that lay the groundwork for women to adopt a sober, secure, and creative lifestyle and empower children to become self-directed, self-confident, and knowledgeable about addiction; and second, to empower women and their children to create and embrace healthy, fulfilling relationships.

Program/Research Description

The historic national substance abuse treatment trend has been based on a male model. Few programs have been designed specifically for women, fewer have offered child care, and rural programs for women with children have been virtually unknown. In this southwest Georgia community, where crack and alcohol use among women is mushrooming, we at Georgia Pines Mental Health, Mental Retardation and Substance Abuse (MHMRSA) Services became alarmed by our inability to offer viable treatment to women with children. Although short-term residential services were available, there was no provision for children whose mothers were in treatment. Our day treatment and outpatient programs were not meeting the needs of many women who were diagnosed with a substance use disorder and who had a multitude of coexisting issues.

As national research indicates, women with substance use disorders frequently have problems with housing, child care, and parenting skills deficits. In 1993, counselors in the Georgia Pines six county outpatient clinics identified 140 addicted women with children who were underserved, due to the paucity of our resources. Furthermore, staff in our detoxification and short-term residential programs had identified 39 women with children who were in urgent need of extensive services that we could not offer.

A closer look at this group revealed an inordinately high proportion of women plagued with multiple afflictions. We discerned that approximately 90 percent of the women had a history of childhood sexual and/or physical abuse. We further determined that 87 percent of the women were currently involved in abusive relationships with men. Women who have been victims of sexual abuse have difficulties in treatment programs that include men. Often women remain in abusive relationships with a spouse or partner because of economic problems. These women have learned to give away their power and are unable to defend themselves. It is essential that women receive services in an nurturing environment that champions women's issues, including honing assertiveness skills.

The target group is 70 percent African American and 30 percent Anglo American. In this area, where it was not until 1970 that the "black" school closed and the educational system became racially integrated, there are a series of cultural, economic, and educational barriers that must be torn down so that African-American women can become self-supporting within this community. Issues of black identity and feelings of isolation and awkwardness in the social camaraderie of a self-help community are special concerns for recovering African Americans. An issue particular to African-American women is the myth of the black superwoman, which espouses that black women can withstand any amount of pain and continue to perform, and the shame associated with being chemically dependent and not living up to this expectation.

Addiction is a family disease and affects not only the addict, but family members as well. When these members are children, they often become the victims not only of the disease but of concomitant dangers. At least 28 percent to 35 percent of child abuse cases occur where drinking is ever-present. Children of alcoholics and other drug addicted parents are far more likely to be truant or delinquent, abuse alcohol or other drugs, drop out of school, and attempt suicide. Children of alcoholics are two to four times more likely to develop alcoholism than others. In our six-county service area, there are exceedingly high rates of child abuse, teen suicides, and juvenile court commitments and institutionalization. In fact, in the 159-county State of Georgia, two of our six counties rank in the top three (158,157) for juvenile court commitments and

institutionalization. These indicators of family dysfunctions are most frequently associated with substance use disorders. The most beneficial time for intervention is in childhood, before behavior patterns become overly rigid. Children of addicted parents are prime candidates for education, prevention, intervention, and treatment. Research indicates that building self-esteem and developing decisionmaking skills are especially important for girls and women influenced by the drug use of significant others.

To meet the critical demands in our rural area, a program was designed and key community agencies were solicited for collaboration. Locating a facility that could accommodate 20 families was the first major hurtle, as real estate here offers much land but few large buildings. After an exhaustive search, an abandoned school was located. Due to persuasive entreaties, the county school board agreed to transfer the deed to the county Commissioners, who in turn agreed to finance the reconstruction and remodeling of a four-building facility located in the woods. The flip side of the dearth of resources in this rural area is the community's enthusiastic reception of additional services. The success of Woodsong as an integral part of a larger community is contingent on supports from key organizations. Agreements with the Department of Family and Children Services, the judicial system, Public Health, the rural medical clinic, the Housing Authority, Rehabilitation Services, the school system, Thomas Technical School, and Valdosta State University have been vital in the provision of quality comprehensive care.

Woodsong has two primary goals. First, in concert with key community resources, Woodsong is to implement an array of culturally relevant services for addicted women and their children. These services guide women through their first stages of recovery and lay the groundwork for a sober, secure, and creative lifestyle and empower the Woodsong children to become self-confident, self-directive, and knowledgeable about addiction. Second, because the target population includes a majority of families who have suffered seriously impaired relations with significant persons in their lives, Woodsong aspires to empower women and their children to create and embrace healthy, fulfilling relationships. The following objectives are being achieved:

- 1. Provide comprehensive residential services for parenting women and their children, for a duration that allows the mother to participate fully in recovery, family treatment, and vocational services that will enable her to return to the larger community and sustain herself and her children.
- 2. Conduct comprehensive physical, bio/psycho/social, financial, educational, and vocational assessments with women and children participating in Woodsong.
- 3. Develop a Family Service Plan for each family participating in Woodsong.
- 4. Conduct a comprehensive children's program for all children residing at Woodsong.
- 5. Increase the quality of relationships in the target population.
- 6. Prevent relapse by providing intensive continuing care, including coordinating with community services, counseling, and followup evaluations.

Case Narrative

A 32-year-old African-American mother was referred to Woodsong for alcohol addiction and crack cocaine dependency. She had experienced multiple negative consequences for her 7 years of extensive drug use, including legal problems, financial problems, and the loss of custody of her youngest child to the Department of Family and Children Services (DFACS). She reported

initially using because of her chaotic home life with an abusive husband who sold drugs to support the family. She has been in numerous treatment programs and outpatient therapy since 1989 and entered Woodsong in 1994.

Intake

At intake, the client reported she has three sons ages 10, 9, and 1. She stated she has a good relationship with her two older sons who live with their father; she visits them every week. She stated at intake that she did not have a relationship with her youngest son, because she has not seen him since he was placed in foster care in October 1993. Her legal problems began in 1992 when she was arrested for theft and sentenced to 10 years probation. During her probation she had a positive drug screen and went to jail for a short time. She was arrested for the second time for reckless conduct (children left unattended) and sentenced to 12 months probation. She stated that her alcohol and drug use tended to interfere with her parenting responsibilities. Her drug use had also interfered with her spiritual growth, in that she had not been attending church. This client reported that she had not worked since 1992 because of her drug use. At admission, this client was on probation for her two prior arrests and an alleged homicide threat to her DFACS caseworker.

Treatment

Entering treatment, this client lacked basic parenting skills, had no social support, had low self-esteem especially in relation to her family, lacked social skills, and had no relationship with her youngest son. During her treatment at Woodsong, a relationship was formed between mother and child. A gradual increase in her parenting skills was observed by everyone working with the family. The mother grew in her ability to interact appropriately, and she slowly learned to control her outbursts of anger. Her son in turn became a bright, active child. The client's test results showed an increase in social support and self-esteem. During her exit interview, the mother reported that her drug and alcohol abuse problems and how she deals with the loss of her children were much better because she is now able to cope with life.

Other issues that were identified in treatment (grief, relationship with her son's father, and her family problems/sexual abuse) were considerably better because of her work with the counselors at Woodsong. Her finances have improved because she has learned to save her money. Her housing situation has also improved because she is now able to live at home with her father. She feels her ability to train her child has improved because she has learned to use time out instead of corporal punishment. She is now relating to her child better—she is more patient and is able to talk to him and in turn he listens. Her relationship with her extended family has improved. She has become more active in the community and is attending Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) meetings. She has been involved in school since coming to Woodsong. Her physical health has also improved. She is better able to provide for herself and her family since coming to Woodsong because she is now employed.

After Treatment

One month after completing the program, the client moved into her father's home with her youngest son. Her two oldest sons still live with their father in another State. She reported the living arrangements to be good; there are no serious family problems. She has been involved in church, aftercare activities with Woodsong, and AA/NA meetings. She has been working full time, and reported that she was in good health. Three months after competing the program, the client was still doing well. Her relationship with her child continues to grow. She was still working and has moved into her own apartment. There have been no reports of any drug use or problems with the law. She is currently working on obtaining full custody of her youngest child. DFACS reports that if things continue as they are, she should receive custody in 6 months.

Methods

The following four elements ensure the actualization of Woodsong goals and are tailored to compensate for the scarcity of local resources and to maximize the community's investment in the project.

Establishing a Service Network Through Community Relationships

Although the original plan was designed specifically for this locale, the network has expanded to include agencies throughout Georgia and neighboring States. The rural setting has provided an appropriate and comfortable alternative to urban options available in other areas. Additionally, local health services, schools, and agencies have participated in Woodsong training events that feature national and regional experts. Recently, Woodsong enacted its first official interstate agreement. The Florida Department of Health and Rehabilitation Services (HRS) referred a family to Woodsong. Because the mother had lost custody of both children, it was necessary for HRS to enter into an inter-State compact with Georgia's Department of Family and Children's Services (DFACS) for monitoring purposes.

Another recent development has been engaging targeted community resources to become involved in and to share in our commitment to the residents of the program. Many agencies and individuals have invested in the success of Woodsong.

Conducting Ongoing Assessments

An evaluation contract with Valdosta State University ensures the integrity of the program and illuminates its accomplishments and flaws. The clinical staff at Woodsong also conduct a variety of assessments throughout the treatment process. Additionally, the Woodsong residents participate in a weekly group consultation for peer- and self-assessment.

Proven Strategies and Approaches to Treatment

Original models have been modified and refined to accommodate the population served. Creative use of the training budget has optimized learning opportunities for staff, the umbrella agency, and other community organizations by bringing nationally recognized specialists in sexual abuse, children exposed to alcohol and other drugs, etc. to Woodsong.

To accomplish the goals and objectives of the project, state-of-the-art strategies and approaches have been enacted and continue to be refined. A variety of educational sessions focusing on women's issues and cultural diversity are offered. Much of the material presented comes from the following sources: *Alcohol and Drugs Are Women's Issues*, edited by Paula Roth; *From Love That Hurts to Love That's Real*, by Sylvia Ogden Peterson; *Awakening Your Sexuality*, by Stephanie Covington; *Do I Have to Give Up Me to Be Loved By You?* by Paul Jordan and Margaret Paul; and an excerpt from *Getting Sober*, *Getting Well*, "Women of Color: Outreach and Treatment Issues." Instructional sessions on addiction, educational activities, life skills training opportunities, daily meditation, bibliotherapy, scriptotherapy, AA and NA meetings, therapy and educational sessions for the dually diagnosed, and an intensive addiction treatment phase are provided through the agency's day treatment component.

An array of prevention, education, and therapy services are offered for children who range in age from 1 to 10 years. Fundamental sources include *I Can Problem Solve*, edited by Myrna B. Shure; "Just For Me"—a video series by the best Foundation for a Drug Free Tomorrow; *Working With Children of Alcoholics*, edited by Bryan E. Robinson; *About Me*, by Randall G. Holland; *Child Support*, by Lois Landy; *Good Touch, Bad Touch*, by Pam Church; and *Twelve Steps to Healthy Touching*, by Kee MacFarlane and Carolyn Cunningham. The Woodsong staff utilize a developmental approach in planning and implementing activities through art, dance, music, games, and social interactions. All children and women are afforded opportunities to participate in a variety of educational, cultural, social, and recreational activities, including local parades, museums, and celebrations, as well as visits to out-of-town exhibits, cultural events, and field trips.

An array of culturally relevant educational and therapeutic relationship centered activities are offered at Woodsong. All activities are designed to enhance positive parent/child interactions. Treatment opportunities for Woodsong families include three times weekly parenting groups and weekly family experiential sessions, family sleepovers for children who exceed the Woodsong age limit, the intensive day treatment's weekly Family Night, and the monthly Family Day at Woodsong. The focus of Woodsong is personal responsibility, including a responsibility to create and embrace healthy relationships. Emphasis is placed on recognizing quality in relationships as integral to sobriety, serenity, and growth.

Employing Competent Staff Who Celebrate Cultural Diversity

The challenge of hiring sensitive and knowledgeable professionals has been met through conscious compromises. That is, although seasoned, well-trained staff are not in abundance in this rural environment, imaginative, dedicated, and open-minded individuals have been selected after careful scrutiny. Woodsong has made significant investments in professional training and opportunities for self-actualization.

Barriers/Problems Encountered and Solutions

During the first year there were two barriers to successful implementation that became increasingly evident. The first centered around sexualized behaviors of the 3- to 6-year-olds. The majority of the women we serve have been victims of sexual abuse, and their children have also

been injured by sexual activity. Many of the children have histories of sexual molestation, and most have witnessed sexual activity of their mothers, who often prostituted themselves to obtain the drugs to which they were addicted. Recognizing the victimization of the children and the chronic and severe consequences that children living in these families suffer was a primary reason for embarking on this project. In Georgia, the Department of Family and Children Services (DFACS) is the entity responsible for handling child abuse matters. To help mend difficulties in the working relationships of Woodsong and DFACS that developed during attempts to address the sexuality issue, the project director requested technical assistance on identifying, monitoring, and treating sexualized children in the CSAT-funded program. A conference was arranged utilizing nationally recognized experts. Other CSAT grantees from the southeastern United States were in attendance, and local agencies, particularly the DFACS staff, were well represented. We have had ongoing training on this issue, and Woodsong staff have become skilled in this field. Interagency relations have stabilized, and a better understanding of the needs of Woodsong families has been accomplished.

The second barrier to success was premature termination by Woodsong women. Exploration of this brought to light two major issues impacting retention. The first was the frustration women were feeling during the first 2 months due to the extensive expectations of their various roles as responsible parents, members of the Woodsong treatment family, day treatment participants, and fellows in the self-help community. After admission to Woodsong, women were initially given a week for on-site assessments, after which they were immersed in the rigors of day treatment, homework, residential responsibilities, and active parenting. In response to the difficulties the women were having assimilating into the program, a stabilization phase was affixed to the front end of the Woodsong treatment continuum. There are now four phases: stabilization, intensive addiction treatment, community reintegration, and continuing care. The stabilization segment facilitates a more thorough transition and orientation to Woodsong, a better structure for completion of the initial battery of assessments and treatment plans, and increased opportunities for staff to identify and address clinical needs. Additionally, the stabilization phase provides a chance for residents to focus on women's issues and relationship education, reflect on and process their level of commitment to recovery, and tend to parent/child bonding.

The second major issue negatively affecting retention was women's investments in relationships with men. The disturbing relationship issues ranged from flirtations in the community self-help meetings that were blossoming into romantic liaisons to continued commitments in pathological relationships, in which the partner was unwilling to participate in counseling. In response to this critical issue, a variety of strategies were incorporated. All women now participate in weekly therapy sessions focusing on relationships and sexuality. The number of outside self-help meetings was reduced, thus affording more mother/child time and eliminating many of the distractions the women were experiencing through their regular interactions with men in the community.

Through a 3-day diagnostic assessment at the start of the second year, a team of three treatment specialists identified staff communications and coordination of services as two areas needing cultivation. A variety of internal controls have been adopted to enhance the consistency of communication among staff. The solutions involve the implementation of weekly administrative and departmental meetings and daily morning check-in meetings. Methods of accountability

have been implemented through meeting minutes and weekly follow-up. Purchasing of bulletin boards and centralizing the work area in the conference room to include needed supplies and pertinent day-to-day programmatic information has also helped to streamline communications. The second area noted in the diagnostic assessment was the coordination of services. The plans targeting this domain include modification of counselors' schedules to ensure the most efficient and appropriate staffing in the women's and children's programs, the new internal communication system, and Woodsong counselors' participation in a weekly intra-agency staffing of consumers utilizing multiple services.

Findings

The experiences of the past 20 months verify the critical need for women to explore their identities and to examine their various societal roles. Although the message in the recovery community is to wait for one year's sobriety before engaging in a new relationship, this may not be a realistic goal for the Woodsong target group. Women who are entering the program and even women who are midstream in treatment exhibit a determination to sustain pathological relationships with men, are unable to identify themselves as individuals, and continue to define themselves based on the number and types of relationships that they have. In this cultural milieu, relationships with men are requisite and define acceptance and happiness. *In the words of Julia A. Boyd* in *In the Company of My Sisters:*

We are led to believe that loving is like magic. It will cure all our ills, make our lives easier, and most of all make us more acceptable to everyone else. The truth is that we can only love someone else as deeply as we love ourselves. It's almost impossible to give someone something that we don't already have in our possession.

Based on our findings, Woodsong gives priority to assisting women to acquire the knowledge and skills required to identify and accept themselves as individuals and to achieve healthy self-esteem. Woodsong is developing and integrating this focus through an array of efforts, including activities centered around Adult Children of Alcoholics (ACOA) and Sexual Abuse Survivors to identify and process key issues and accelerate transformations.

Recommendations

If we are to assist in the empowerment and self-actualization process of others, it is imperative that we ourselves be empowered and self-actualized. Woodsong makes an investment in staff through therapeutic weekends and by supporting a variety of paths to enlightenment. We highly recommend this approach to other programs.

References

Church, P. Good Touch, Bad Touch. Valdosta, GA: Golden Publishing, 1993.

Covington, S. Awakening Your Sexuality: A Guide for Recovering Women and Their Partners. San Francisco: Harper, 1991.

Finkelstein, N.; Duncan, S.A.; Derman, L.; and Smeltz, J. *Getting Sober, Getting Well: A Treatment Guide for Caregivers.* The Women's Program of CASPAR, 1993.

Holland, R.G. About Me. Charlotte, NC: kidsrights, 1992.

Landy, L. Child Support. Charlotte, NC: kidsrights, 1984.

MacFarlane, K., and Cunningham, C. *Twelve Steps To Healthy Touching*. Charlotte, NC: kidsrights, 1990.

Paul, J., and Paul, M. *Do I Have To Give Up Me To Be Loved by You?* Center City, MN: Hazelden Educational Materials, 1983.

Peterson, S.O. From Love That Hurts to Love That's Real. Park Ridge, IL: Parkside Publishing, 1989.

Robinson, B, ed. Working With Children of Alcoholics. Lexington, MA: D.C. Heath, 1989.

Rossellini, G. and Worden, M. Of Course You're Angry. Center City, MN: Hazelden Foundation, 1985.

Roth, P, ed. Alcohol and Drugs Are Women's Issues. New York: Scarecrow Press, 1991.

Shure, M.B. *I Can Problem Solve: An Interpersonal Cognitive Problem-Solving Program.* Champaign, IL: Research Press, 1992.

Women of color: Outreach and treatment issues. In: Finkelstein N.; Duncan, S.A.; Derman, L.; and Smeltz, J. *Getting Sober, Getting Well: A Treatment Guide for Caregivers.* The Women's Program of CASPAR, 1993.

Mental Health and Substance Abuse: Challenges in Providing Services to Rural Clients

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Abstract

This article describes the rural health care delivery system, particularly as it has an impact on

those who need mental health and substance abuse services. The concepts of availability, accessibility, and acceptability of health care are examined in relation to traditional rural belief systems described in the literature. Professional opportunities and challenges are highlighted. Strategies are included that can enhance the continuum of care for clients who live in regions with sparse resources. The content is based on a review of the literature, the author's many years of personal and professional rural experiences, and verbal reports from professionals who practice in a variety of rural health care settings. The discussion is intended to create awareness about and sensitivity to the special concerns of rural clients who need mental health and substance abuse services.

Federal policymakers are proposing major cuts in the budgets for mental health and substance abuse and are also proposing major changes and reductions in the Medicaid program. The Medicaid program will probably be restructured with greater State-based control. To address concerns stemming from these proposals, mental health and substance abuse professionals met at a 1995 conference, "Partners for Change," designed to bring these professionals together with policymakers. By the end of the conference, the country's mental health planning directors, alcohol and substance abuse directors, and State Medicaid directors had formally agreed to an unprecedented collaboration that would be fostered by the Federal Government (APHA 1995). This stance is a major shift from the past pattern in which mental health and substance abuse strategies were dealt with separately and often unequally. The approach is logical, because some individuals have both mental health and substance abuse problems, and many who seek help for medical problems also have emotional problems. It was recognized at the conference that partnerships between private providers and all levels of government are necessary to effectively use diminishing resources. As the health system shifts to managed care and contracts are mandating more out-of-hospital interventions, quality care for mental health and substance abuse may be even more difficult to obtain. It is hoped that the new trend will lead to treatment for mental health and substance abuse as part of primary care.

Rural residents are faced with some rather unusual concerns when seeking mental health and substance abuse services in a reformed system. There is, however, no "common" culture for rural residents. Every rural community is unique, with its own underrepresented groups, economic and social structures, health problems, resources, and patterns of caring for members in need. Stemming from similar geographical and population factors, sociologists concur that living in small towns or in a sparsely populated area creates some unique experiences for residents as opposed to living in a more populated area. These variations and their impact on mental health and substance abuse services will be examined (Lee 1991; Rogers and Burdge 1985; NIMH 1986, 1989, 1990; Wagenfeld et al. 1994; USDHHS 1986).

Rural Preferences and Beliefs

Often cited themes in the literature reflecting traditional rural preferences are subjugation to nature, fatalism, and an orientation to concrete places and things (Flax et al. 1979; Wagenfeld 1982). Ruralites are believed to be more politically conservative, have stronger religious preferences, have a work ethic, be less tolerant of nontraditional beliefs, and have a preference for primary relationships (kith and kin). Compared with an urban lifestyle, the typical rural

lifestyle is characterized by greater spatial distances between people and services; an economic orientation related to the land and nature (agriculture, mining, lumbering, fishing); work and recreational activities that are cyclic and seasonal in nature; and social interactions that facilitate informal (face-to-face) negotiations. In essence, small towns are the center of trade while churches and schools are the center of social activities for localities (Bergland 1988; Brown et al. 1994; Mellon 1994; Neese and Fox 1994; Stein 1989; U.S. Office of Technology Assessment 1990).

Self-Reliance and Self-Care Behaviors

Self-reliance, which includes self-care behaviors, is another characteristic attributed to rural residents. Historically, self-care skills helped people to survive in austere, isolated, and rugged environments. This is reflected in the statement, "We take care of our own," from which we can infer a preference for receiving care from familiar people. Neighborliness and close-knit families can be beneficial in eliciting health promotion and compliance behaviors. In other cases, the members in these groups become enmeshed, resulting in a closed system. For instance, while a close-knit family can be highly supportive to someone with an emotional or substance abuse problem, in other cases, the family can hinder a sick person from seeking outside help. An overly solicitous family also can develop a high tolerance or immunity to the dysfunctional behavior exhibited by a family member. In these situations, the impaired person comes to be viewed as normal, as others in the family do not notice as odd, idiosyncratic behaviors progress to pathology (Bushy 1994; Johnson 1994; Taylor 1982; Weinert and Long 1991.)

As with a family, dysfunctional interpersonal dynamics also can occur in close-knit rural communities. For instance, residents in a small town may develop a tolerance toward certain lifestyle activities, especially in regard to consumption of alcohol, sexual practices, and corporal punishment. Mental illness and substance abuse, too, may come to be viewed by a community as a family's weakness (a skeleton in the closet). Secrecy is reinforced by the rule of silence: "What happens in the family—stays in the family." This adage is of particular significance in rural communities, where most of the local families have lived and worked together for generations. In order to maintain the integrity of the family, it becomes important not to let everybody in town know about sensitive family issues, in particular, substance abuse, domestic violence, incest, or mental illness (Murray and Keller 1991).

Consider the case of Joe, a client who lives in a remote southern town with less than 800 residents. Recently, Joe was diagnosed with a bipolar disorder. While providing family history, he tells the outreach counselor, "I heard some local people say that Uncle Tom, Great Grandpa, and a cousin drank a lot, were big spenders, and tore up the town every now and then. They all spent time at the State hospital, too, but our family never talks about that. Friends say my mental health problem is a family weakness." These remarks illustrate how familiarity among local residents, limited professional services, and lack of education perpetuate the stigma associated with mental illness and substance abuse.

Work Ethic and Health

How a group defines health and illness also is culturally based and can influence health care-seeking behaviors. For example, some rural people define health as the ability to work; to do what needs to be done. One can infer that, for them, illness probably means not being able to do one's usual work. The association between work, health, and illness reinforces the rural work ethic and dictates choice of leisure activities. As for mental illness and substance abuse, a family may continue to deny one of its member's emotional problems as long as he or she is able to complete assigned work activities. Over time, the expectations for the affected person are modified to accommodate declining abilities and the family's perception of the disability (Bushy 1994; Flax et al. 1979; Wagenfeld et al. 1994).

Consider the case of 31-year-old Brian. The townsfolk say he is strange and sees things that aren't real. His mother disagrees with them. She says, "How can people talk about him that way? He always helps Dad with the farm work. Oh, he drinks a little when he gets to a bar but, he only goes into town once in a while à never had much interest in girls and always was different than my other five children à he's more religious and dependable. Dad says most days he does a really good job with the outside work!" Obviously, the work ethic colors these parents' perception of Joe. More than likely, Joe's ability to complete work assignments also will be a consideration if Joe seeks professional treatment.

A work ethic can be attributed in part to being dependent on small, family enterprises, another characteristic of rural environments. Small businesses, such as farming, ranching, grocery stores, and service stations, however, often do not provide employee benefits, in particular health insurance. Economic structures have perpetuated the number of working poor in rural communities. Other activities that may be delegated a secondary position to work by rural residents include:

- Participating in hobbies and leisure activities (a waste of time).
- Seeking health care, other than emergency services ("I'll go to the doctor on the next rainy day, when we can't get into the fields.")
- Keeping followup health care appointments ("I'm feeling fine—so why should I drive 100 miles to have the social worker tell me that I'm doing all right?)
- Obtaining prescribed medication ("Mike says he isn't hearing voices. We can wait until the harvesting is done to get his prescription filled. Then we'll have more money, too.")

In brief, the individual's needs may be relegated secondary to the family enterprise, which may be their primary source of income.

Prevalence Rates and Utilization of Services

Generally the incidence of mental health and substance abuse problems in rural areas is reflected as "treated prevalence," that is, the number(s) of clients who actually use a service. Some reports suggest a higher incidence of depression, alcohol abuse, domestic violence, incest, and child neglect in rural populations.

These reports can be partly attributed to the economic woes confronting many agriculture-based communities, which create family and community stress. The term "farm stress" reflects the emotional response to economic circumstances evidenced by the rising incidence of suicides and accidents resulting in injury and death, especially in adolescent males and adult men (Wagenfeld et al. 1994; Wagenfeld and Wagenfeld 1990).

Beyond those reports, estimates on the prevalence of mental health and substance abuse problems in rural populations for the most part are just that—estimates. They are based on word-of-mouth reports by professionals who represent an urban-based agency that provides outreach services to rural communities in its catchment area. These estimates probably are even less reliable if one considers that services to treat clients with mental health and substance abuse problems are not even available or accessible to those who may desperately need it. The problem is even more ambiguous when examining rural residents' utilization patterns of social support systems.

Levels of Social Support

The first level of social support includes the services that are volunteered by family and friends, for which there is no remuneration. Often there is an unwritten code of reciprocity among participants in this informal system.

The second level includes the services provided by community groups, such as church, school, and civic organizations (e.g., homemakers' clubs, church circles, fraternities, the Chamber of Commerce). Group members collaborate to provide assistance to needy individuals and families within the community. Examples of reciprocal helping activities include volunteering time, services, food, and other nonmonetary items as well as contributing financially to those in need. Donating in-kind services offers a kind of "insurance policy" should a catastrophic event occur in a volunteer's family system.

The third level of support consists of formal services, sponsored by governmental agencies and/or private industry. Financial remuneration is expected for the services provided, albeit often on a fee-based-on-income.

In comparison with urban residents, rural residents have historically relied on the two informal levels of social support, thereby enhancing their self-reliance. Recent demographic and social changes in some rural regions have disrupted natural helping systems, forcing rural residents to rely more on the third level of social services. Yet critically needed mental health and substance abuse services often are not available, accessible, or acceptable to rural communities.

Health Care Delivery Issues

Availability of Services

"Availability" refers to the existence of and the necessary personnel to provide a service. Economically, the sparseness of population limits the number and array of human/health care services in a given region. The per-capita cost of providing special services to a few people often

becomes prohibitive, particularly in frontier regions. Moreover, almost 40 percent of the mental health and substance abuse personnel are hospital based in rural areas, as opposed to 18 percent for the country as a whole. Consequently, the availability of mental health and substance abuse services is dependent on the stability of rural hospitals, many of which are in tenuous financial situations and are on the verge of closing. Specialists, too, tend to be concentrated in urban environments. Overall, physicians and other types of health care and human service providers are fewer in rural areas. Especially lacking are health personnel with advanced education, in particular in the areas of mental health and substance abuse. Hence the Federal designation of Health Professional Shortage Areas (HPSAs) describes regions that are significantly underserved (Wagenfeld et al. 1994).

The availability of mental health and substance abuse professionals, and their services, also is influenced by educational programs. Most professional schools are located in urban areas, giving students limited exposure to rural practice. On completion of their educational programs, health and human service professionals have a preference for urban employment. This preference can be partially attributed to being educated in an urban specialty bias, as opposed to being educated as a generalist, the latter being better suited for rural practice.

Where mental health and substance abuse services and personnel are scarce, the existing ones must be prudently allocated. To address the professional shortages, rural providers often are expected to assume multiple roles in order to function in a variety of situations. For example, in one practice setting, a counselor in a mental health clinic may need to function in the roles of case manager, grant writer, crisis worker, administrator, public relations person, and therapist. Additionally, several times a month this person may be scheduled to provide outreach services to schools and senior citizen facilities that are located in various towns in the multicounty mental health district. This also is the case for rural addiction counselors who must provide a range of services in a large geographical area (Fuszard et al. 1991; Parker et al. 1991).

Accessibility of Services

"Accessibility" refers to whether a person has access to, as well as the ability to purchase, needed services. Accessibility to mental health and substance abuse services by rural clients is impaired by a variety of factors, including great distances that must be traveled to obtain services, lack of public transportation, lack of telephone services, insufficient numbers of providers to provide outreach services, inequitable reimbursement policies, unpredictable weather conditions, and the inability to procure entitlements to obtain needed services. Furthermore, rural people who experience human service needs frequently are less able to be an advocate on their own behalf. They may be limited by physical or emotional disabilities or even lack the sophistication to access a complex system (Wagenfeld and Wagenfeld 1990; Weiler and Buckwalter 1994).

Access to public and private funding sources to implement needed programs also can be hampered by a lack of grantsmanship skills on the part of rural providers. Successful grant writing evolves with practice and requires dedicated time on the part of a writer to produce a fundable project. Those prerequisites, however, may not be realistic expectations for providers in professionally underserved regions, as they often are overextended with excessively large client

caseloads. Additionally, they may not have access to continuing education (CE) programs that disseminate current information on grant writing (Human and Wasum 1991).

Rural political structures, too, may resist outside help. Resistance frequently is evidenced by leaders in a community not providing support for a grant proposal to procure funding for a special program. Interestingly, the political power in rural communities often is vested in an elite portion of the local population. These individuals frequently are unaware of the needs of local underprivileged groups. Consequently, powerless racial and ethnic minorities may have human service requirements to which the more affluent and powerful majority in rural communities are not sensitive or sympathetic. Their behavior reflects traditional rural values related to the work ethic and the stigma associated with seeking public assistance for a personal or financial problem. Consequently, rural people needing human services may not seek, or accept, even those programs that are available and accessible to them (Wagenfeld et al. 1994).

Acceptability of Services

"Acceptability" refers to whether or not a particular service is offered in a manner that is congruent with the values of a target population. Considering the diversity among rural people, acceptability of mental health and substance abuse services can be hampered by the following factors: traditions of handling personal problems (self-care practices); beliefs about the cause of a disorder and the appropriate healer for it; and lack of knowledge about emotional disorders and the place of formal services in treating the condition.

Acceptability of services by rural groups also is influenced by the urban orientation of health professionals. A provider's attitude toward rural practice can perpetuate difficulties in relating to the rural environment as well as to the people living there. Insensitivity also can exacerbate rural clients' mistrust of mental health and substance abuse professionals who provide community outreach. Thus, residents may perceive outreach providers as community outsiders, which can perpetuate feelings of professional isolation and nonacceptance.

To ensure that a program is acceptable by the target community, a community assessment should be done prior to planning and implementing a new program. The use of culturally relevant data can help to ensure that services are provided in a manner deemed appropriate by the target population (Bushy 1994; Wagenfeld et al. 1994). When planning a new mental health and substance abuse program, for example, providers should consider the target population's perceptions about:

- Space (e.g., population density of a community; being afraid to drive in a larger city)
- Distances (e.g., miles to the nearest neighbor, doctor, specialist, and mental health and substance abuse clinic)
- Time and season (e.g., planting crops and doing farm chores; coordinating an appointment for a client to see the psychiatrist with family business activities, such as buying machinery parts and purchasing groceries; or, scheduling a followup clinic appointment to coincide with a community or school event, such as the rodeo, county fair, harvest festival, athletic tournament)
- Natural events (e.g., snow storms, tornados, subzero temperatures, rain).

In brief, consideration of personal and environmental factors can go a long way to enhance the continuum of care for rural clients.

Professional Opportunities and Challenges

The problem of recruiting and retaining health professionals in rural areas also affects planning and implementing mental health and substance abuse programs. The following discussion summarizes factors that have an impact on rural professional practice. These factors can be seen as opportunities and/or challenges by rural professionals who provide mental health and substance abuse services. It is important to emphasize that, as with practice in an urban setting, one will view a particular rural factor (deterrent) as extremely negative, while another perceives that same factor to be a challenge (opportunity) that can be resolved via one's creative abilities.

Quality of Lifestyle Versus Professional Isolation

Living in a rural environment offers a lifestyle that some professionals find very appealing. Depending on the geographical area, the benefits include rearing children in a smaller community, a lower cost of living, outdoor recreational opportunities such as skiing, fishing, hunting, and hiking, a slower paced lifestyle, less crime, not having to commute great distances in heavy traffic, less air pollution, personally knowing your neighbors and clients, and personal and professional visibility that lends itself to making a difference in the community's health care system.

Isolation Versus Solitude

One common characteristic that has a significant impact on the recruitment and retention of mental health and substance abuse professionals is the geographical remoteness of a rural community. How remoteness is perceived, however, depends upon one's life experiences. For instance, residents in frontier States such as Utah, Montana, Idaho, North Dakota, New Mexico, and Alaska do not view remoteness from the same perspective as those living in California, New York, Ohio, or Florida. Likewise, one person may describe rural residency as "living in isolation," while another views it as "personal solitude." Even so, the most frequent complaint of rural providers is the professional isolation they experience, especially the lack of available peer support and access to continuing education. Professional isolation poses a particular challenge for health professionals with advanced education in mental health and substance abuse, as the need to function as a generalist can result in forgetting specialty skills. Since salaries in rural areas often are lower than in urban settings, some may say that the compensation is not adequate for an advanced practice (Bushy 1994).

Despite the apparent obstacles, many rural professionals have creatively established network/support systems that are as reliable as those that may be in closer proximity. Additionally, there is a national trend for universities and professional schools to provide peer support, consultation services, and off-campus (outreach) courses via the electronic media to rural providers. Collaborative efforts between educational institutions and health care agencies are helping to alleviate the problem of professional isolation in some remote communities.

Technology is rapidly evolving, and we can expect to have more continuing education offerings using those strategies.

Informal Networks Versus Confidentiality

News travels quickly through a small community because there are fewer people, many of whom are acquainted. Most small towns have an active local grapevine that includes information about the community's sick (especially those with an emotional problem) as well as their experiences with the health care system. These informal networks can offer important support to the impaired and yet interfere with maintaining professional/client confidentiality and anonymity. It is not unusual for confidentiality issues to arise because of the location of the mental health and substance abuse clinic. When a clinic is located in a highly visible area of the town, passers-by will note whose car is parked in front of the building and who goes in and out of the building. For these reasons, careful consideration should be given to the best location for a mental health and substance abuse clinic, as it is not unusual for local residents to recognize other community members by the kind of car(s) they drive. It may be prudent to place the clinic within a building that houses another medical or dental clinic, hospital, social services, or general office building.

Familiarity (Lack of Privacy) Versus Anonymity

Once a professional has gained entrance to and is accepted by a community, practice problems can arise from being widely recognized by local residents. Because of the visibility, it is difficult to have some degree of privacy and to get away from work. Clients, or someone in their family may recognize—acknowledge—and then stop to chat with "my counselor." This degree of familiarity accommodates rural people's preference for informal communication patterns. A client may not think it unusual to telephone a caregiver's home or discuss a personal concern with a professional in a public place, such as a grocery store, service station, or at church, school, or community functions.

Effective ways to prevent such events are through public education on what constitutes a crisis, the process to be followed should an untoward event occur, and learning to tactfully evade those situations and bringing up another subject of mutual interest.

Specialist Versus Generalist Role

It is not overstating the case to say that rural professionals should be generalists, as opposed to being specialists. Health professionals caring for rural client systems are expected to work with all age groups that have a myriad of problems. They must, however, be aware of formal and informal resources in order to provide a continuum of care to clients needing mental health and substance abuse services.

Client Preference Versus Professional Burnout

Acceptance by a community and patient satisfaction, combined with health professional shortages, results in rural providers having extremely large client caseloads. On occasion, a physician, nurse, or counselor may be on call around the clock for weeks or months. Being on

call does not necessarily mean that one will be called or actually see a client. It does mean, though, that the person on call is restricted to the community in the event he or she is called. Obviously, one can become burned out by unremitting professional demands if limits are not set. Therefore, when first establishing a practice in an underserved area, it is important to identify someone who is willing to provide backup coverage to reduce the risk of burnout.

Strategies To Provide a Seamless Continuum of Care

Considering the inequitable distribution of services and providers, the following strategies can facilitate providing a continuum of care for clients living in rural areas by integrating formal with informal resources.

Avoid Duplication Of Services

To reiterate the position statements from the "Partners For Change" conference in mental health and substance abuse, resources are limited and therefore should be prudently used, especially in rural areas. Interdisciplinary collaboration is critical to reduce turf issues between providers within a given region. Each provider must assume personal responsibility to be knowledgeable of available resources and be able to make appropriate referrals in order to implement a seamless continuum of care for clients needing mental health and substance abuse services.

Provide Meaningful Discharge Planning

Urban professionals often are not familiar with mental health and substance abuse services that are available in the rural catchment areas. For that matter, neither are many of the professionals who live in outlying communities.

To address this deficit, the rural health professional can compile and disseminate information on available services and resources, using the following guidelines: List formal agencies and institutions as well as informal organizations. Include all of the services, names of providers, credentials, addresses, telephone numbers, and hours of service. Be sure to include emergency listings. This listing should be disseminated to both rural and urban professionals to assist them in appropriate discharge planning for rural clients (Parker et al. 1991; Tierney and Baisden 1990).

Use Case Management

Case management can help to avoid duplication of services, facilitate interdisciplinary collaboration, and integrate formal with informal services that are tailored for a client. Case management is particularly well suited for environments having fewer resources, professional shortages, and restricted access to services—characteristics of many rural communities. This model meshes nicely with a rural preference of having a personal acquaintance involved in administering care to one in need.

Anticipate Potential Adverse Events

All clients should be actively involved in their discharge planning, which includes anticipating and planning for potential adverse events. Potential problems for rural clients can arise from unavailable or inaccessible services, for example from a pharmacist, dietician, physical therapist, occupational therapist, psychiatrist, or social worker. It is prudent for mental health and substance abuse professionals to negotiate a contingency plan (contract) that clearly states what the client will agree to follow should events go awry or a crisis occur. An individual who generally is available to the client should be specified. In some cases, a second person (backup) may be needed should the first one be unavailable. Examples of potential backups include the sheriff, a clergy member, a fellow church member, a county nurse, a dependable neighbor, or extended family. Situations to consider include whether or not telephone service is available in the home, lack of access to a crisis line, no available mental health and substance abuse professionals (for example, the town has outreach services only every other Monday), restricted access to a pharmacy to get a prescription filled, and limited laboratory services to monitor medication levels (Bushy 1994).

Clients who are placed on medication *always* need careful and ongoing education about their pharmacotherapy regimen. Rural clients may require additional considerations related to restricted access to pharmacy services. For instance, seriously depressed persons having a potential for self-harm usually are dispensed a carefully controlled supply of medication to reduce the risk of overdosing. In rural environments, logistical barriers, such as not having access to transportation or the need to travel a great distance to the nearest pharmacy, may result in a client needing a greater number than usual of doses of medication dispensed directly to them. For the purpose of risk management, identify a responsible individual who sees the client on a regular basis. (Obviously, he or she must be informed of the responsibilities and expectations and agree to be involved in the contingency plan.) This person should be taught to monitor a client's medication practices, safely secure extra doses, then issue a specified amount at designated intervals.

Noncompliance behaviors also should be discussed and planned for. It is not unusual for a client to feel good after taking medication for a period of time. If family members are not informed about this phenomenon they, too, may believe the client is back to normal, especially if they cannot afford the prescription. In the contingency plan, identify situations and events that preempt the client's reluctance to take medications or not adhering to the prescribed dosage. Verbally instruct and then clearly write the effective interventions to alleviate medication side effects. For some clients, it may be effective to list behaviors that occur with noncompliance, such as hearing voices, drinking alone, threatening or frightening family, or wanting to harm self or others. Include a procedure to follow if the client does not keep an appointment—for instance, contact a certain neighbor, minister, sheriff, or personally visit the client's home. The contingency plan should be written explicitly and then explained (interpreted) by the client in his or her words. It should be trial-tested. Role play all of the options and involve all in the plan.

Consider the Client's Situation

In planning and scheduling followup care, consider the client's lifestyle and home situation, particularly for those living some distance from the provider. Before scheduling a followup appointment, anticipate why a client might not keep it. For example, the major industries and family activities in rural areas often involve *seasonal work* (haying, planting, harvesting, calving), *routine daily activities* (feeding animals, milking cows, transporting children to and from school, preparing meals for hired help), and *environmental uncertainties* that can impair travel (icy roads, snow storms, mud slides). If at all possible, accommodate those responsibilities.

Educate the Community

Education about mental health and substance abuse symptoms and interventions is particularly lacking in the general population. Health professionals in general and mental health and substance abuse providers in particular have a responsibility to educate the community as a whole on those topics. An effective strategy to disseminate information to target groups is by collaborating with existing and accepted community organizations. Many rural families traditionally obtained health information through the female head of household. Homemakers and church circles historically included a health component in meetings, and this was a family's principal source of health information. Other effective approaches to disseminate information are the local media, such as newspapers, church bulletins, public service programs on radio and television as well as organizational newsletters (for example, Farmers Union, Farm Bureau, WIFE, the County Extension Agent's office). Posting information at collective meeting places in a small town—for example, on bulletin boards located in restaurants, grocery stores, bars, the county court house, and grain elevators—is another way to inform the public of mental health and substance abuse programs.

Materials should be prepared at an appropriate reading level and presented in language that is culturally acceptable and meaningful to the target audience. Be especially sensitive to the high number of individuals who may be functionally illiterate (reading below the fifth grade level) and have English as their second language.

Programs offering continuing education also may be unavailable to rural professionals; those that are provided may not be relevant to rural practice. Since mental health and substance abuse clinics often are part of a larger network (State and Federal Agencies), this affiliation can facilitate bringing an outside speaker to a community for a continuing education program. For instance, consultants from the State mental health and substance abuse department will be knowledgeable about current psychiatric pharmacotherapies, State/regional services, and grant writing. Other topics on mental health and substance abuse that are in demand by professionals include:

- Communicating effectively with individuals under excessive stress or with emotional problems
- Making appropriate discharge referrals to mental health and substance abuse services
- Responding to a crisis call
- Recognizing and assessing for substance abuse and mental illness

Assessing and reporting physical and sexual abuse in clients.

In brief, professional-community partnerships are critical to effectively use limited resources! Administrators of mental health and

substance abuse programs should initiate and encourage student clinical rural experiences with institutions of higher learning. Ultimately, exposure should result in a greater number of graduates electing to work in rural practice.

Rural health professionals have high community visibility and are in positions to influence change and establish partnerships. The rural health professional should develop the skills to speak to a variety of groups and individuals, including other professionals, consumers, and policymakers. Elected officials, too, are interested in policies having an impact on mental health and substance abuse programs and their rural constituencies. Inform lawmakers about local needs and offer suggestions to assist them in making better informed policy decisions on mental health and substance abuse in their district. In this era of shrinking budgets and shifts in political power, partnerships are needed at all levels to effectively address the mental health and substance abuse needs of the U.S. population as a whole, and rural residents in particular.

References

American Public Health Association. Partnerships key to weathering budget cuts, block grants, says SAMHSA administrator. *The Nation's Health*, Nov. 1995. pp. 4-5.

Bergland, R. Rural mental health: Report of the National Action Commission on the Mental Health of Rural Americans. *Journal of Rural Community Psychology* 9(2):29-40, 1988.

Brown, B.; Voorberg, N.; and Schofield, R. Wellness education for individuals with chronic mental illness living in the community. *Issues in Mental Health Nursing* 15(3):239-252, 1994.

Bushy, A. When your client lives in a rural area—Part I: Rural health care delivery issues. Part II: Professional practice considerations for nurses. *Issues in Mental Health Nursing* 15(3):253-277, 1994.

Flax, J.; Wagenfeld, M.; Ivens, R.; and Weiss, R. *Mental Health and Rural America: An Overview and Annotated Bibliography*. Washington, DC: National Institute of Mental Health, 1979.

Fuszard, B.; Sowell, R.; Hoff, P.; and Waters, M. Rural nurses join forces for AIDS care. *Nursing Connections* 4(3):51-61, 1991.

Human, J., and Wasum, K. Rural mental health in America. *American Psychologist* 46(3):232-239, 1991.

Johnson, J. Sleep and alcohol use in rural old-old women. *Journal of Community Health Nursing* 11(4):211-218, 1994.

Lee, H. Definitions of rural: A review of the literature. In: Bushy, A., ed. *Rural Nursing*. Newbury Park, CA: Sage, 1991.

Mellon, S. Mental health clinical nurse specialist in home care. *Issues in Mental Health Nursing* 15(3):229-238, 1994.

Murray, J., and Keller, P. Psychology in rural America: Current status and future directions. *American Psychologist* 46(3):220-231, 1991.

National Institute of Mental Health. *Mental Health Research and Practice in Minority Communities: Development of Culturally Sensitive Training Programs.* (DHHS Pub. No. ADM 86-1466). Washington, DC: U.S. Govt. Print. Off., 1986.

National Institute of Mental Health. *The Future of Mental Health Services Research*. DHHS Pub. No. ADM 89-1600. Washington, DC: U.S. Govt. Print. Off., 1989.

National Institute of Mental Health. *Crisis Intervention Programs for Disaster Victims in Smaller Communities*. DHHS Pub. No. (ADM)90-675. Rockville, MD: the Institute, 1990.

Neese, J., and Fox, J. *Mental health of rural elderly: A research agenda*. Issues in Mental Health Nursing 15(3):203-215, 1994.

Parker, M.; Quinn, J.; Viehl, M.; McKinley, A.; Polich, C.; Detzner, D.; Hartwell, S.; and Korn, K. Case management in rural areas: Definition, clients, financing, staffing and service delivery issues. In: Bushy, A., ed. Rural Nursing. Vol. 1. Newbury Park, CA: Sage, 1991.

Rogers, E., and Burdge, R. *Social Changes in Rural Societies*. Englewood Cliffs, NJ: Prentice Hall, 1985.

Stein, H. The annual cycle and the cultural nexus of health care behavior among Oklahoma wheat farming families. *Culture, Medicine and Psychology* 6:81-89, 1989.

Taylor, J. Viewing health and health needs through many eyes. The ethnographic approach. *Mental Health Issues in Rural Nursing*. Boulder, CO: Western Interstate Commission for Higher Education, 1982.

Tierney, K., and Baisden, B. Crisis Intervention Programs for Disaster Victims: A Source Book and Manual for Smaller Communities. Rockville, MD: National Institute of Mental Health, 1990.

U.S. Department of Health and Human Services. "Factors Influencing the Geographic Distribution of Mental Health Care Professionals." Paper presented to the Health Resources and Services Administration Board, Bureau of Health Professionals, Washington, DC, 1986.

U.S. Office of Technology Assessment. *Health Care in Rural America*. (QTA-H-434). Washington, DC: U.S. Govt. Print. Off., 1990.

Wagenfeld, M. Psychopathology in rural areas: Issues and evidence. In: Keller, P.A., and Murray, J.D., eds. *Handbook of Rural Community Mental Health*. New York: Human Sciences Press, 1982.

Wagenfeld, M.; and Wagenfeld, J. Mental health and rural America: A decade review. *Journal of Rural Health* 7(6):707-722, 1990.

Wagenfeld, M.O.; Murray, J.D.; Mohatt, D.F.; and DeBruyn, J.C. *Mental Health and Rural America:* 1980-1993; An Overview and Annotated Bibliography. NIH Pub. No. 94-3500. Washington, DC: Office of Rural Health, Health Resources and Services Administration; Office of Rural Mental Health Research, National Institute of Mental Health, National Institutes of Health; U.S. Department of Health and Human Services, 1994.

Weiler, K., and Buckwalter, K. Use of substitute decision makers by the mentally ill rural elderly: An issue of concern for mental health nurses. *Issues in Mental Health Nursing* 15(3):215-229, 1994.

Weinert, C., and Long, K. A theory and research base for rural nursing practice. In: Bushy, A., ed. *Rural Nursing*. Vol. 1. Newbury Park, CA: Sage, 1991.

Community Diversity Issues: Strategies for a Comprehensive Multicultural Framework

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Abstract

Changes in our society make it imperative that academic professionals and other educators prepare for working with diverse families in the context of communities. For rural communities in particular, the use of community leadership infrastructures combined with grassroots initiatives is the cornerstone for successful programs for youth moving toward their adult years. The authors suggest a conceptual framework for community multicultural educators using Bronfenbrenner's (1979) social ecological framework and Gollnick and Chinn's (1983) goals for multicultural education. Qualitative data from 30 experienced community leaders focusing on the process of developing positive community understanding of cultural diversity provide rich

experiential information. Their comments particularly focus on the importance of using a dynamic process to develop a sense of community diversity.

Demographics in the United States have shifted. The vacillating economy, the transfigured work force, the extended age range, the expansion of alternative lifestyles, and the diverse balance of race, class, and ethnicity have had a dramatic effect on educational and community processes. In addition, changes in society have affected the family structure over the past 30 years. Today about 26 percent of all children under 18 years of age are living with a divorced parent or stepparent (Behrman and Quinn 1994). The percentage of one-parent-headed families with children has increased from approximately 22 percent in 1985 to over 25 percent in 1992 (Casey Foundation, Kids Count Data Book 1995). The percentage is even higher within African American families, due to multiple factors (Lawson and Thompson 1995).

Comparative demographics in the labor force show that in 1990 females comprised 53 percent of the civilian labor force compared with 35 percent in 1960. Labor statistics for African American males (recorded only since 1973) and Hispanic males (recorded since 1980) have remained essentially unchanged, even though the overall population in the United States for these black and Hispanic males increased by 32 percent and 37 percent, respectively (U.S. Bureau of Labor 1991).

Shifts to the population have occurred through increased migration and increased birth rate among nonwhite groups. It is predicted that from 1990 onward, the Hispanic, Asian/Pacific Islander, American Indian, and non-Hispanic black populations will increase, and the non-Hispanic white population will decrease proportionately (Lewitt and Baker 1994). Additional changes are reflected in the widening division between classes. Class differentials are noted in accelerated urbanization driven by unprecedented population growth rates creating housing deficits and strains to local economies and infrastructures (Camp 1990).

Rural America is comprised of a heterogeneous group of people representing a great diversity of cultures, occupations, wealth, lifestyles, and physical geography (Murray and Keller 1991). Rural America represents a microcosm of social problems with a variety of prevention programs in progress and under development. But prevention programs and organized interventions must recognize underlying factors that create and sustain high-risk conditions. For example, teaching youth to "just say no" is one strategy, but it does not provide a depth of understanding for youth to learn to manage multiple levels of risk. The development of constructive coping mechanisms and unbiased decisionmaking skills gives youth the tools they need to reject drugs and other substances, as well as to make other healthy lifestyle choices. The challenge is to empower youth with a range of skills to make sound decisions as they pave their way to adulthood.

Youth as tomorrow's leaders of communities are the focus of today's educators. The challenge, then, is in preparing today's educators to model and teach bias-free decisionmaking.

Communities Are Faced With Many Challenges

Rapid demographic shifts have created new challenges for individuals and communities. Multiple social issues on local agendas range from early pregnancy to homicide and are couched in racial or ethnic terms. The same can be said for research on substance abuse, in which ethnicity is characterized as a potent sociocultural factor (Trimble 1995). The reported consumption of substance abuse in rural America is proportionally equal with that of urban youth (Farrell et al. 1992), and adolescent substance use/abuse is reported to cross race, class, and gender lines comparably (Wallace et al. 1995).

In response to identified social concerns, rural communities in particular find grassroots initiatives critical to successful programs (Deaton 1992). Community leaders and decisionmakers struggle with innovative solutions for managing growth in their local economies while targeting various social issues with the parallel recognition of diversity in their populations. Strategies and experienced voices are needed to cope with rapid transition and encourage sensitive communication at the grassroots level.

Community decisionmakers, social workers, extension educators, church leaders, public officials, and other educators involved with culturally diverse populations are challenged to provide suitable models for community understanding in communities that are often comprised of a mainly dominant culture.

The general focus of this paper is to demonstrate the link between theory and application in adapting a comprehensive format for community dialogue and acceptance of cultural diversity. An integrated approach for community multicultural educators is offered using Bronfenbrenner's (1979) social ecological framework and Gollnick and Chinn's (1983) goals for multicultural education. This paper uses community leader insights to support this framework and is generally directed toward multicultural educators, but more specifically toward public service workers and community leaders.

Conceptual Framework

Work in communities requires a knowledge of the subject matter that surrounds a given issue plus a knowledge of community development processes. Community development processes involve a detailed awareness of the community climate, a wellûdeveloped perception of the formal and informal community leadership, an understanding of targeted audiences, and the incorporation of a variety of communication and trust building measures. Finding leaders and educators with this mix of expertise is difficult.

Whether multiculturalism becomes the content issue—or the issue is another risk factor—additional qualities to facilitate community understanding must be learned and applied in order to plan interventions with the socio-environmental conditions taken into consideration. By combining community processes and the understanding of multiculturalism, an alternative model begins to emerge. The model offered here is based on Bronfenbrenner's ecological systems perspectives to capture the community development aspects and is overlaid with Gollnick and Chinn's (1983) guide for multicultural education to capture the content needs.

Contexts of Diversity

As a context for understanding this model, definitions of culture, cultural diversity, and multiculturalism follow. Culture is defined as the values, norms, customs, and beliefs shared by a group within a particular society. Culture then becomes a universality that can be passed along to the people through a socialization process. Cultural diversity is an empirical descriptor that can be measured by the absence or presence of multiple cultures existing within one particular community. Although cultures within given communities can be described in a variety of ways (family structure, race diversity, gender diversity, ethnic diversity, sexual orientation, etc.), descriptions alone do not provide a conceptual framework that can guide thoughts, attitudes, and/ or behaviors.

Multiculturalism is the concept that better describes attitudes and the ongoing thought process that surrounds diversity. Multiculturalism involves recognizing and celebrating the fact that a monocultural (dominant) environment is insufficient for the needs of a social system. It is a belief system that promotes the idea that multicultures need to be in existence for members of a society to gain an opportunity to learn about the other in order to enrich all lives. Everyone then can be recognized as having uniqueness that is valuable to a given community.

Becoming a multicultural community means accepting and valuing cultural diversity. Any given community is comprised of separate individuals who are connected by some common thread of interest, proximity, or characteristic. Distinctively, communities vary in a range of individual factors—ages, ethnicities, family sizes. They also vary by the services available, economic conditions, job opportunities, health, and child care options. But within communities, there is commonalty—what Bronfenbrenner and colleagues (1984) term as "interlocking or integrated functional subsystems" (p. 286).

In the ecological model, Bronfenbrenner (1979) describes multiple societal systems, that when visually depicted, are concentric circles. The innermost circle of the ecological environment is referred to as the microsystem and represents the most direct day-to-day reality for children and families, such as their home, school, or neighborhood settings. Individuals within the system are viewed as dynamic and continually in development. Linkages or interrelationships between settings (i.e., home, school, workplace, neighborhood) are called mesosystems. Although depicted as a separate circle, this system actually represents a reciprocity and interaction between individuals and their multiple environments.

In a separate circle, exosystems refer to one or more settings that do not directly involve, but do affect persons. Examples include a parent's workplace and its indirect effect on a child, or a community network of friends who support one another. The outermost circle or system is referred to as the macrosystem. The macrosystem represents broad interconnected beliefs, attitudes, and social systems such as economics, media, immigration, or public policy decisions.

Within any culture or subculture, settings of a given kind (homes, schools, churches) tend to be similar; however, between cultures, settings are distinctively different. These complicated systems, referred to as "cultural blueprints," underlie institutional organizations, people's attitudes and assumptions, and the workings of political and economic systems (Bronfenbrenner

1979). These blueprints, however, can be modified. Garbarino (1982) contends that it is possible to "socially engineer" systems to cope with differences and developmental problems. This possibility for change is the door that many communities are trying to open in order to maximize the development of children and families.

Although they know it is a lengthy and sensitive process, some community leaders are making strides to engineer public attitude relative to multicultural understanding. The key to successful negotiation between settings is to first recognize the coexistence of subsystems and linkages between mesosystems that are already woven together in many integrated ways (Bronfenbrenner et al. 1984).

Maximizing Community Systems Development

Along with Bronfenbrenner's ecological systems, he offers many hypotheses about developmental potential. By using the hypotheses as a framework to understand community systems, it may be possible to maximize the developmental potential of groups interacting in communities.

Bronfenbrenner (1979) hypothesizes that to maximize the developmental potential between systems, we must ensure that the demands on individuals in different settings are compatible. When changes occur in settings, changes also occur in the individual's position or role in that new setting. For example, a transition in role occurs when a new parent is presented with his or her newborn child. A change in role for a working individual occurs when there is a change in jobs or after retirement. Roles must be in agreement with what the individual can manage.

According to Bronfenbrenner (1979), another component to maximizing developmental potential between individuals is to ensure that there are supportive linkages between settings and that an individual's entry into a new setting is made in the company of one or more persons with whom she or he has participated in other settings. The link with an unfamiliar group or individual can be eased through others. Locating someone who is at ease in both settings and knowledgeable about both environments can build bridges between settings and between people. Such a person is referred to as a "primary link" (Bronfenbrenner 1979) and can help provide entry for newcomers into new settings, and also help in translating the dialogue between people who are different in language, beliefs, communication style, and culture. Examples here can range from entry into a gang setting to attending a new church.

The most productive mode of communication between settings is personal or face to face. To build multicultural communities, open two-way communication between settings must be evident, with as much inclusion of family members in the communications network as possible (Bronfenbrenner 1979). Entry into new settings without two-way communication and supportive linkages can lead to imbalances between systems and, perhaps, to misplaced decisions.

Positive changes between individuals and systems are secure when changes produced in an individual carry over into other settings (Bronfenbrenner, 1979). School teachers report examples of transitions between settings when adolescents who learn about conflict resolution at school attempt to assuage flaring tempers at home. Additional evidence that changes are

transpiring is when linkages between settings encourage growth, trust, goal consensus, and a continual appraisal of new information (Bronfenbrenner 1979). Such an example would include policymakers seeking out the opinions of those affected by the policy.

Further evidence of developmental change is a shift in the balance of power (Bronfenbrenner 1979). For a shift in power to in fact occur, individuals and groups have to be able to yield personal power while trusting emerging power structures.

These selected Bronfenbrenner's hypotheses can be intertwined with the goals of multicultural education offered by Gollnick and Chinn (1983). Their goals are to promote the strength and value of cultural diversity, human rights, and respect for those who are different from oneself; to promote alternative life choices for people, social justice and equal opportunity for all people; and support equity in the distribution of power among groups. But the goals themselves are not enough to ensure a positive multicultural community experience. Successful implementation of these goals, in many cases, means overcoming a culturally embedded ideology.

Gollnick and Chinn's conceptual framework for inviting a safe place for cultural diversity to occur can be seen as a foundation for Bronfenbrenner's systems model. Bronfenbrenner's work interacting with Gollnick and Chinn's (1983) work creates a holistic model that allows a reciprocity in building a vibrant community. These combined frameworks can be seen as a way of promoting multiculturalism as a philosophy and cultural diversity as a real possibility for community growth.

Growing communities are defined by strong social support networks of families, workplaces, and social agencies. Since the community provides a critical educational and socializing base for its citizens, multiple factors influence whether or not its citizens will adopt an activist ideology to promote agendas that in turn set the tone and provide the climate and context for change (Garbarino and Kostelny 1992). In communities, the context and readiness for change varies broadly. Many educators and community leaders, however, share high hopes. As community leaders call for a change and seek research-based support, it is the responsibility of researchers and educators to assist communities to prepare for change. The question that should be examined is, How can information effectively be used to eliminate the influence of ascriptive criteria in order to look at the value of cultural diversity? Understanding community leaders' perceptions regarding cultural diversity is the first place to learn about promoting community multicultural education programs. This research focuses on the perspectives and practices of community leaders who have experience in affecting community attitude through multicultural educational programs.

Method

Sample and Data Collection

Qualitative data from 30 experienced community leaders focused on the process of developing positive community understanding of cultural diversity. A cross-sectional approach was used to select a sample of community leaders. Leaders were located through personal and professional networks by inquiring about individuals who had been active in affecting community

understanding of multiculturalism or diversity. A nonrandom selection process was used to develop the sample. Contacts were made by phone, through two focus groups, and mail. Eleven community leaders were contacted by telephone and agreed to be interviewed. Telephone and face-to-face interviews lasted on the average 45 minutes to 1 hour. This first group of community leaders included three school district administrators, four college faculty members, and four community development youth project leaders. There were seven men and four women interviewed: four were African American, five were white, one was from India, and one was from China.

Two focus groups totaling 19 people from different occupations and communities shared ideas from their experiences in community-based programs. Included in the group were school personnel, representatives of social services, police officers, educators, ministers, and other human service professionals. These people were participants in a diversity training program and were asked the same questions as the first group.

Instruments

For both telephone interviews and face-to-face interviews, open-ended questions were posed about the community factors and actions the leaders perceived as critical in cultivating community acceptance of diversity. In general, the questions focused on changes in human development as framed by Bronfenbrenner (1979). The questioning framework included factors that create linkages between settings; factors that encourage growth, trust, and goal consensus; how community leaders continue to appraise new information; and how the balance of power is managed.

The format of the interviews generally began with a question about the community and its multicultural activities. Following this discussion, the interviewer probed about the sorts of multicultural activity that had been tried and accepted within the community. Questions about the community leaders' personal involvement in affecting community attitude were followed by questions about their perceptions of the community climate and receptivity. Examples of these questions include:

- 1. What is your perception of the current attitude of the community at large regarding its understanding of diversity?
- 2. What key things need to happen in order to form a positive respect for differences?
- 3. What roadblocks do you foresee?
- 4. What aspects of the community will work in your favor to accomplish your goals?
- 5. What aspects of the community will work against accomplishing your goals?

The political climate and balance of power in the community was explored with questions such as:

- 1. How would you describe the current leadership in the community in regard to their willingness to respond to this issue?
- 2. Do you feel that you have a thorough understanding of how your work group will interact with local officials, schools, media, law enforcement, decisionmakers, etc?

Growth of the family, development of mutual trust, and public awareness were probed with questions such as:

- 1. What planned ways do you think families could/should be involved in the work of the diversity coalition? How have families been involved?
- 2. What do you think are some of the most pressing needs for families and children?
- 3. Are parents fairly motivated toward involvement in this issue?
- 4. What methods of communicating with and educating the public do you think work best in your community?

In addition to the interviews, 16 participants who had enrolled in a continuing education course on multiculturalism were asked to complete a questionnaire nearly 3 months after an educational session. Respondents represented 11 different States and had occupations such as Head Start teachers, child care center directors, and school administrators.

The open-ended questionnaire asked respondents to indicate how they had approached the topic of community acceptance of multiculturalism in their community and to indicate important components that could be learned from their experiences. Other than their State and position, no other demographic information is available on the respondents.

Collective Results

Collectively, community leaders provided a rich backdrop of experiential information and reflected many common themes, many of them paralleling Gollnick and Chinn's (1983) multicultural education goals. However, in addition

to the goals, comments highlighted the importance of the process of developing a sense of integrated diversity in the context of the community.

Developing a Sense of Community Diversity

The *process* of community understanding about multiculturalism and diversity is as important as the content. As expressed by one community leader, "This is not a short term process . . . but one that must evolve through collaborative empowerment." All interviewees agreed that a broad representative core of community leaders must be involved in order to build a foundation for community action. In their words:

- "Resist the temptation to simply focus on the dominant minority. Broaden definitions of diversity to include all ethnicities, classes, and oppressions."
- "Be cautious of some subgroups who may act counterproductively to the mission of the coalition. Fold these persuasions into the overall operation of the coalition."

Leaders indicate that it is critical for a core group of community leaders to move cautiously through a series of steps to build trust and group ownership within the leadership group by reaching goal consensus before extending into the larger community. These excerpts illustrate their concerns about a deliberate consensus building group process:

- "Community collaboration is empowering."
- "Community partnerships are more empowering."
- "There must be a shared vision with all partners."
- "There must be shared resources."
- "Some groups merely communicate. Communication leads to learning and problem solving. A
 higher level of group processing is cooperation. Cooperation leads to coordination of people and
 resources in order to achieve individual objectives. The group interaction level at which most
 community programs are most successful and more fully institutionalized is when efforts are
 collaborative. Collaboration leads to integration and a systems change. There is shared vision,
 shared resources, shared accountability among all players."

In order for the core group to work through their own philosophy and develop a plan for the larger community, skilled leadership is essential. As one leader said, "Communities need good full time leadership to pull efforts together." Community leaders note that a dynamic leader can carry the process through many critical phases.

Several community leaders recommended constantly reaffirming the agreedûupon definition of diversity and the goals of the intercommunity leadership group. By developing a collective community diversity definition, a starting point and common ground is developed from which to build strategies using individual expertise and community services. This step appears seemingly simple, but as one leader commented, "There is a necessity to constantly revisit the group mission . . . having a plan is a must."

Community leaders recognize the value of developing a positive community-specific systematic approach to recognize difference but also to promote shared power through collaboration among leaders and community groups. Acknowledging existing community power structures is critical before planning for collective action. Among the statements to support this notion is:

"There are inequities in power and inequities in resources. . . . It is necessary to rebuild the paradigm of communities as segmented and specialized. We do not yet operate in a holistic manner."

The following excerpt from an interview conducted with an urban school superintendent clearly depicts the delicacy of confronting a power and privilege issue in one neighborhood to ensure linkages between settings:

Having the support from the black church has been difficult. . . . The white element doesn't want the change. The white group has counterorganized a group to reduce crime and keep blacks families out of the neighborhood. We are trying to include both factions in the community effort to overcome this friction.

Gollnick and Chinn (1983) emphasize that multicultural education must promote *social justice* and equal opportunity while Bronfenbrenner (1979) recognizes the value of *continuing to* appraise new information. This is evidenced by the ongoing battle of affirmative action and workplace rights: It is clear that to create an environment that is socially just and equitable requires laborious time and great patience. Community leaders reflected upon the arduous process with comments such as:

- "This is social reform, and social reform is not easy."
- "There is a necessity to constantly revisit the group mission."
- "It is not a recipe, it has glitches."
- "Change is often painful."
- "Collaboration is a process—not a goal. It may take 3 to 4 years to communicate and coordinate before you can collaborate—don't give up."

Discussion

It is critical to understand that community efforts toward most social issues should be viewed through a lens of multiculturalism. And in turn, developing community plans to deal with social issues must be viewed as a series of interrelated processes. Melaville and Blank (1993) emphasize that community development is a process of change powerful enough to overcome layers of resistance in attitudes, relationships, and policies. The participation of a broad representation of people in a community-based process leads to greater changes.

As community leaders, each of these respondents saw himself or herself as having a responsibility to recognize the needs of their community and take action to address the needs. Once multicultural education was identified as a community need, these leaders became multicultural thinkers and facilitators to promote multiculturalism. In conjunction with Gollnick and Chinn's goals, these respondents became engaged as part of the multicultural community system. Reflecting Bronfenbrenner's hypotheses, these leaders became an underlying force in actively fostering cultural diversity issues. A resulting reciprocity was created to support the original notion that ideology and action must interact holistically.

In multicultural communities addressing family and youth risk factors, active facilitators in turn help communities understand each person's role and responsibility in regard to that issue. To consider this in rural America, there should be a recognition that prevention efforts cannot ignore factors that create and sustain high-risk environments. Risk status is based on a wide variety of factors; thus, interventions should relate to existing socio-environmental conditions of the larger social arena in which families and youth function (Collins 1995).

Professionals must give close consideration to the demographics of the community, the community ideology, and the interplay of systems within the community. Educators, service agency representatives, and community leaders must realize that collective action occurs by assessing need, and then addressing the need with personal and collective contributions to realize the strength found in convergent visions.

References

Behrman, R.E. and Quinn, L.S. Children and divorce: Overview and analysis. In: Behrman, R.E., ed. *The Future of Children*. Vol. 4 (1). Los Angeles: David and Lucile Packard Foundation, 1994.

Bronfenbrenner, U. *The Ecology of Human Development: Experiments by Nature and Design.* Cambridge, MA: Harvard University Press, 1979.

Bronfenbrenner, U.; Moen, P.; and Garbarino, J. Children, family, and community. In: Parke. R., ed. *The Family: Review of Child Development Research*. Vol. 7. New York: Sage, 1984. pp. 283-328.

Camp, S.L. *Cities: Life in the World's 100 Largest Metropolitan Areas.* [Wall chart]. Washington, DC: Population Crisis Committee, 1990. (Available from Population Action International, Suite 550, 1120 19th St., NW, Washington, DC 20036-3605.)

Annie E. Casey Foundation. *Kids Count Data Book*. Washington, DC: Center for the Study of Social Policy, 1995.

Collins, R.L. Issues of ethnicity in research on the prevention of substance abuse. In: Botvin, G.; Schinke, S.; and Orlandi, M., eds. *Drug Abuse Prevention With Multiethnic Youth*. Thousand Oaks, CA: Sage, 1995.

Deaton, B. Key issues facing rural communities and their development. *Economic and Policy Information for Missouri Agriculture* 35(4), 1992.

Farrell, A.D.; Anchors, D.M.; Danish, S.J.; and Howard, C.W. Risk factors for drug use in rural adolescents. *Journal of Drug Education* 22:313-328, 1992.

Garbarino, J. Children and Families in the Social Environment. New York: Aldine, 1982.

Garbarino, J., and Kostelny, K. Child maltreatment as a community problem. *Child Abuse and Neglect*, 16(4):455-464, 1992.

Gollnick, D., and Chinn, P. Multicultural Education. St. Louis: C.V. Mosby Company, 1983.

Lawson E.J., and Thompson, A. Black men make sense of marital distress and divorce. *Family Relations* 44, 211-218, 1995.

Lewitt, E.M., and Baker L.G. Race and ethnicity—Changes for children. In: Behrman, R. *The Future of Children*. Vol. 4(3). Los Angeles: David and Lucile Packard Foundation, 1994.

Melaville, A.I., and Blank, M.J. *Together We Can.* Washington, DC: U.S. Govt. Print. Off., 1993.

Murray, J.D., and Keller, P.A. Psychology and rural America: Current status and future directions. *American Psychologist*, 46:220-231, 1991.

Trimble, J.E. Toward an understanding of ethnicity and ethnic identity, and their relationship with drug use research. In: Botvin, G.; Schinke, S.; and Orlandi, M., eds. *Drug Abuse Prevention with Multiethnic Youth*. Thousand Oaks, CA: Sage, 1995.

U.S. Bureau of Labor Statistics. Bulletin 2307. *Monthly Labor Review: Employment and Earnings*. Washington, DC: U.S. Govt Print. Off., November 1991.

Wallace, J.M.; Bachman, J.G.; O'Malley, P.M.; and Johnston, L.D. Racial/ethnic differences in adolescent drug use. In: Botvin, G.; Schinke, S.; and Orlandi, M., eds. *Drug Abuse Prevention with Multiethnic Youth.* Thousand Oaks, CA: Sage, 1995.

A Group Intervention Project for Eight Rural Mothers In a Tragic Dance With Alcohol

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Abstract

A community-based, women-centered, therapeutic alcohol treatment group served eight rural mothers in Grand Isle County, Vermont. Both the clinical and structural approaches recognized the distinct treatment needs of these women. All the women described improved coping and developed supportive relationships with each other. The results led to the conclusion that limited projects may initiate and establish continued social support mechanisms.

A woman's linkage to alcohol may alter her safe passage through childbearing, have an impact on her child rearing, and affect her relationships. This alcohol attachment may jeopardize her adaptation to life course roles. During the past decade, robust research has identified significant biopsychosocial health risks of alcohol abuse for women (Amaro 1990; Blume 1990; Gomberg 1993; Hennessy 1992; Sokol and Abel 1988; Wilsnack 1984). Other research reports that women underutilize treatment because programs are often structurally inaccessible, particularly for women with dependent children, and are perceived as empathetically unresponsive (Finkelstein 1993; Kauffman et al. 1995; Wallen 1992; Wilsnack 1984).

This paper describes and discusses an intervention project for a group of rural childbearing-age women from Grand Isle County, Vermont. The project was called the Mothers, Alcohol, Relationships, and Kids Group (MARK). A structurally accessible group treatment effort was implemented that addressed alcohol abuse within the context of these women's lives.

Purpose

The MARK group was based on a multilevel perspective and provided a women-centered, community-based therapeutic group for a special aggregate experiencing the health risks of alcohol abuse. The goals of this intervention group were to (1) provide education about the biological and psychosocial health risks of alcohol abuse for women, families, children, and the community; (2) promote individual strengths and adaptive coping strategies, and (3) create helping relationships.

Setting

Grand Isle County lies in the most northwestern corner of Vermont. It is a chain of connected islands within Lake Champlain. The 5,268 residents live in five distinct townships (each an island community) which support five elementary schools. In this county there is the office of the State's Attorney and Victim's Advocate, the District Court, the local sheriff's office, one physician, a Parent Child Center, and a total of 15 outlets for beer and wine, two of which are State liquor stores with \$0.9 million in gross spirit sales annually (Vermont State Liquor Board 1993). There are no supermarkets and no large businesses. Individuals and families travel 23 to 40 miles to access the human service network and depend on outreach workers. In this county there are clear differences between the lavish lakeside estates and the trailer homes. Many families need to supplement their nutrition by fishing all year from the lake despite the health warnings limiting fish meals because of toxins.

The challenged women from this community are stoic and silent. They are proud and dedicated to their families and children. Their perceived powerlessness and disadvantaged status produce mistrust and fear of others and often result in social networks so enmeshed that they produce conflicted rather than supportive associations.

Community Involvement

The actual prevalence of women from Grand Isle County, Vermont, who were in harm's way from their own or others' alcohol abuse was unknown. However, the community's parent educator, school nurse, child protection worker, public health nurse, victim's advocate, probation and parole officer, school principal, and the owner of a liquor store felt that many women and families were experiencing the health risks of alcohol abuse. This group was also troubled by the inaccessibility of treatment services for these women. There are no local community-based alcohol treatment group programs in this county.

The framework for launching this intervention was based on the concepts found in Adams and Krauth's (1994) Professional Approaches to Community Health (PATCH), which assumes that human services provide a single strand in the complex web of relationships and services that provide care in the community. It emphasizes a focus on the community's identification of a health problem and involves the community in addressing the concern.

Fundamental to PATCH practice is the collaboration, cooperation, and partnership among informal groups, voluntary organizations, schools, businesses, and other health and human service providers. This shift from individual efforts to a team approach enables coordination of activities and lowers the perceived barriers between the professionals and the community they serve. The PATCH model interweaves formal and informal care; it calls for responsive services that are directed by the community, not the service system, and values the community as a reservoir of assets and strengths.

A mosaic of community professionals identified a need, formed a partnership, and collaborated on the design and implementation of an intervention project that served 8 women and 12 children. This small but significant effort reflected local health concerns and identified community health resources. Community groups provided the place, the child care, and the transportation. Other groups provided the referrals. The Vermont Office of Drug and Alcohol

Programs funded \$1,000, the community's Health Council funded \$500, and a local liquor store contributed \$50 to support this project.

Clinical Issues

A voluminous literature exists on alcoholism, and current research is now indicating that a host of background and precipitating factors differentiate men from women. The clinical rationale of the MARK group was guided by the significant gender differences in life context in which abusive drinking is embedded. The psychology of women's development provided the organizing treatment framework, and group-based approaches provided the process. The cornerstone of MARK was the sensitivity to the developmental needs of the members and their critical life transitions.

Increased knowledge and understanding of alcohol abuse may motivate change, and learning more effective skills may alter the impact. However, both these treatment principles must recognize the other factors that influence health outcomes. The MARK group leaders understood the lives of these women and their layered health risks. The linkages between the legacy of abusive drinking, Vermont culture, poverty, social disadvantage, motherhood, poor education, and lack of personal power were recognized. The therapeutic approaches stressed processoriented work. The leadership style was supportive and underscored the importance of being a mentor and role model.

Implementation

The MARK group was implemented in June 1995 at the community's Parent Child Center. The group was led by two women, one of whom is a parent educator and the other, the author of this paper, a psychiatric nurse practitioner with certification in alcohol and drug counseling. Both are experienced community outreach professionals and are familiar with the culture, values, and traditions of this community and its women.

The group met weekly for 2.5 hours. The mothers met in an inviting and private setting. The children were cared for in a nearby but separate area within the same building. A typical group meeting began with greetings, settling the children with the sitters, making coffee, and setting up chairs. The first 15 minutes were spent checking in and reporting the events of the week, followed by discussions of scheduled topics. A 30-minute break allowed the group to go to the adjacent store, get snacks and a beverage (charged to the group fund), and return to sit on the steps of the Center to chat. The final hour was devoted to processing and sharing experiences.

From the beginning, the women were encouraged to assume ownership of the group. Everyone's successes were immediately rewarded and new information was presented in a relevant context. Humor abounded and was often a welcome emotional relief. Over time a base of trust, motivation, and ownership allowed the members to work through the far-reaching impact of chemical abuse.

The group celebrated 12 weeks of committed attendance by going out to a restaurant for supper, and all members were given a T-shirt with the logo "On your MARK, stretch and grow." T-shirts were also given to everyone who helped launch and support this project, both professional and natural community caregivers.

Findings

A wide range of consequences of abusive drinking was represented in this small group of eight women. All reported familial abuse of alcohol which (they perceived) resulted in troubled childhoods and substance abuse in adolescence. Three women had been adolescent runaways and five had been teenage mothers. Three women had experienced alcohol-related motor vehicle accidents, with one woman recently severely injuring her spinal cord. This trauma resulted in complete paralysis below her waist. Another woman was on probation from an alcohol-related incident.

All had experienced an alcohol-abusing partnered relationship, and five women's partners continued steady or episodic drinking. Three women were in early recovery. Although the experiences were different, abusive drinking had altered the life courses of each of these women.

This group of eight ranged in age from 21 to 36 years. There were members who had completed high school, had dropped out; had been employed, had never worked; who lived as married, or who were single parents. All found a place to share common experiences and learn from each other.

The original intent of the project was to run the group for 12 consecutive weeks (June-August 1995) and evaluate the intervention using a pre- and post-survey on (a) increased knowledge and understanding of the health risks of alcohol abuse, (b) identification of new coping skills, and (c) perception of social support from the process. The results of the survey found both increased knowledge and better coping, but an unexpected finding was the overwhelming positive response to the perception of social support. The women wanted to continue meeting, and it was decided to continue a supported meeting twice monthly until December 1995. From the onset, this group was made fully aware of the funding and our current shrinking assets. As a group, they decided to save money by providing their own snacks and meeting when some of the children would be in school, to save on child care expenses.

In December 1995, the group announced it wanted to continue and is presently meeting without the artificial supports of child care, transportation, and place. Although the leaders still attend, the women have taken complete responsibility for all arrangements. They decided to meet in each other's homes and provide care for the children. This commitment to each other and the process was unexpected.

Another surprise was the group's evolution from dependence upon the experts for support to reliance upon each other to discuss problems and seek advice for stressful situations. This movement away from professional help (which all of these women had used extensively) was not anticipated. These women began to deal with their own problems and gain the confidence, power, and skills to make choices in their lives.

The individual findings were as unexpected as the group commitment results. One woman, who had dropped out of high school, is now enrolled in a completion program; probation requirements have been fulfilled, and recovery continues. One woman joined a parent education program; one woman separated from her partner; one woman enrolled in a college course; and no one became pregnant.

Conclusions

This health promotion effort set out to address a need voiced by a concerned group of community professionals. It involved these professionals in the creation of a program that was guided by a multilevel

perspective. This intervention was developed within the community's existing organization, the Parent Child Center, which serves families. It also recognized the need to involve both the professional and lay caregivers in the community.

This project demonstrated that small programs can be implemented at the local level without a complex organizational structure, months of strategic planning, and substantial funding. It also demonstrates that one-time grants can spark independent ongoing support mechanisms.

Several elements contributed to the success of this pint-sized project. The community supported and facilitated this health intervention, all structural barriers were addressed, and the treatment approaches were comprehensive. It is believed that the life courses of the women in the group were guided toward greater health. It is hoped that these changes will be durable enough to carry the women through future life events.

The design of this limited project rests on the principles that chemical abuse and dependency cannot be separated from the totality of a woman's experiences and context. Furthermore, programs woven into the fabric of the community create a spirit of engagement and empowerment.

Recommendations

Those of us who sincerely care about the health of women face an enormous challenge in the drug and alcohol field. We are more aware of the complexity of alcohol and other drug problems among women. The challenge calls for programs that reach all women and empower them to promote their own health. Furthermore, we must work closely with communities to create and deliver services at the local level and regard all efforts as important. After all, even the smallest initiative has the potential to make a larger impact.

References

Adams, P., and Krauth, K. Community-centered practice to strengthen families and neighborhoods: The PATCH approach. In: Adams, P., and Nelson, K., eds. *Reinventing Human Services*. Hawthorn, NY: Aldine de Gruyter, 1994.

Amaro, L. Violence during pregnancy and substance abuse. *American Journal of Public Health* 80:575-579, 1990.

Blume, S.B. Chemical dependency in women: Important issues. *American Journal of Drug and Alcohol Abuse* 16(3 and 4):297-307, 1990.

Finkelstein, N. Treatment programming for alcohol and drug-dependent women. *International Journal of the Addictions* 28:1275-1309, 1993.

Gomberg, G. Recent developments in alcoholism: Gender issues. *Recent Developments in Alcoholism* 11:95-107, 1993.

Hennessy, M. Identify the woman with alcohol problems: The nurses' role as gatekeeper. *Nursing Clinics of North America* 27(4):917-924, 1992.

Kauffman, E.; Dore, M.; and Nelson-Zlupko, L. The role of women's therapy groups in the treatment of chemical dependence. *American Journal of Orthopsychiatry* 65(3):355-363, 1995.

Sokol, R., and Abel, E.. Alcohol-related birth defects. *Neurotoxicology Teratology* 10:183-186, 1988.

Vermont Liquor Control Board. *Fifty-ninth Annual Report*. Montpelier, VT: State of Vermont, 1993.

Wallen, J. A comparison of male and female clients in substance abuse treatment. *Journal of Substance Abuse Treatment* 9:243-248, 1992.

Wilsnack, S. Alcohol Problems in Women. New York: Guilford Press, 1984.

Confronting Intergenerational Substance Abuse Patterns in a Rural School Setting

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Abstract

Young people can break free of intergenerational substance abuse patterns when they experience academic and social success, and when they feel hopeful about a future direction. Black Hills Careers Academy is a public school in Sturgis, South Dakota for rural adolescents. The Academy has

• Built a program that promotes thinking over impulse

- Utilized the community in exploring future career options
- Documented academic achievement and remedial progress
- Exposed students to concepts common to all values systems
- Used an applied humanism model to attract a staff that does not punish.

Development of the Academy was beyond the resources of any single school district in western South Dakota. It came about through collaboration between school districts and human services agencies, and through partnerships with the Black Hills business community.

Black Hills Careers Academy, a South Dakota public secondary school for rural youth whose lives have been disrupted by substance abuse, has faced two challenges since opening in 1981.

The first challenge is that of developing programs and attracting the right staff in an effort to help young people experience success, learn to think through situations rather than to act impulsively, and to explore career options. The Academy has documented progress toward those ends. The second challenge relates to keeping the school funded, a perpetual problem in a State with limited industrial revenue and shrinking tax bases. By the mid-1990s, when the school had evolved so that it could point to encouraging student growth indicators, its student population had changed.

In the early 1990s, students' ages ranged quite evenly from 14 to 18, but now it is rare to see students over the age of 16 referred. In an era of tight budgets, referring schools and juvenile courts have had to let older students drop out.

If there can be a silver rim lining the cloud of needy children going unserved, it is perhaps this: the Academy's smaller population (about 80 students will attend in 1996, compared to about 100 annually in the early 1990s) has meant a good environment for individualized learning and for fine-tuning the staff's sense of purpose and its methods.

Purpose

Black Hills Careers Academy believes young people grow intellectually and emotionally only when they are experiencing success and when they see ways of being successful in the future. For Academy students, individualized success might be defined in terms as diverse as staying sober, passing math, going a week without fighting, or starting a business. But however success is defined personally, students can usually see how it is connected to at least one of these four Academy emphases:

- All students are engaged in activities designed to promote thinking over impulse. The
 Academy recognizes that these youth have dealt mostly with adults who react
 impulsively to situations and believes young people can be expected to learn to think only
 when adults mediate their activities. The writings of Reuven Feuerstein (1979, 1980)
 have directed the Academy's approach in this area.
- The Academy, in partnership with local businesses, encourages each student to anticipate a career instead of just a string of jobs. Closely related to alcohol and drug abuse in rural

- South Dakota is an intergenerational legacy of poverty. In some counties here, unemployment rates are 90 percent or more. Students are exposed to career possibilities that are especially relevant to rural life, including entrepreneurial opportunities.
- Youth who experience substance abuse difficulties always fall behind, to some degree, in academic achievement. Since 1992, the Academy has adopted an individualized Mastery Learning system, where both students and teachers monitor content and skills acquisition, and where that acquisition must be mastered, individually, at an 80 percent level.
- Despite some concerns nationwide about public schools teaching values, the Academy believes young people can best grow into strong adults by considering concepts common to all values systems—for example, loyalty, justice, truth. About one-third of students here are Native American, and the staff has been sensitive in working Lakota cultural imagery into the study of values.

Methods

Drugs and alcohol are always a key factor in the lives of Academy students and their families, but the staff has chosen not to create a program that rests on treatment. Observations of students who have attended such single-dimension programs led the Academy administration to seek a more comprehensive approach, addressing interpersonal, behavioral, societal, and ethical issues. The staff views substance abuse as a barrier to maximum human development, and its program as intervention. For students currently in some stage of chemical abuse, and for those who relapse, the Academy recommends an evaluation to determine what level of treatment is necessary. Often this results in the student and family attending an outpatient treatment program with continuing followup. It is not unusual for those students referred to the Academy by the judicial system to be in court-ordered outpatient treatment. Many students attend weekly meetings of various community-based, 12-step programs in an effort to remain sober.

Students know that Black Hills Careers Academy is a school of high expectations. Graduation means documented *success in all academic areas*, entering the world of work with a *careers portfolio*, and developing improved *thinking abilities* and *character expectations* that can help them avoid substance abuse.

A day at the Academy begins with an in-school breakfast and the chance to visit with classmates and staff. Teachers know that, above all else, they must be positive role models for young people who may have grown up dealing daily with dysfunctional adults. Breakfast is a time when students can affirm the staff's consistent character.

All students start the day with clean slates despite any problems the day before. From breakfast, it is on to classes in rooms physically structured to feel like school, where teams of two teachers work with small groups. That way, one teacher is always free to offer individual help while the other continues to lead the group. There are daily lessons in math, science, language arts, and social sciences.

Offered three times a week, instrumental enrichment activities are paper and pencil exercises viewed by students as challenging puzzles. These exercises relate to the Academy's emphasis on learning to think instead of reacting by impulse. The content behind the exercises is not the

focus. Rather, each of the 500 instrumental enrichments helps students develop specific problem solving skills and cognitive abilities that can be generalized to social interactions, family life, school, and work.

The Academy is affiliated with the national REAL program (Rural Entrepreneurship through Action Learning), which advocates studying entrepreneurship. Students—by meeting local business people, planning their own businesses, and teaming with classmates to actually run those businesses—learn lessons that will serve them whether or not they become entrepreneurs as adults. Their understanding of business operations will make them better employees and consumers.

The Academy's counselor works with students individually and in groups to examine how people develop a sense of character. In 1996, students are considering these concepts: respect, hope, justice, honesty, loyalty, caring, truth, and citizenship.

In 1996, staff and students together are taking their first trips through cyberspace via the Internet. The Academy recognizes that rural South Dakota can be a place where some personalities feel entirely alone and disconnected. The Internet will help those students find people with similar outlooks and interests, and to develop a broader view of who they are. For example, Native American students here sometimes see only two narrow images of their people: "reservation Indians," or "city Indians" who mostly live in a particular Rapid City, South Dakota, neighborhood. The Internet should open their eyes to many Native American lifestyles and to ways their culture has enriched American life as a whole. Also, the Internet has far-reaching implications for how Academy students will learn about substance abuse, and how they will explore careers and possibly create businesses.

To the greatest extent possible, the Academy keeps adults with whom these youth live involved in the schooling. Residential options include students' natural homes, a network of specially trained foster homes, and a group home operated by Lutheran Social Services.

Program Description

This is a program that can best be defined by its staff. In 1985, Dr. Phillip S. Hall studied the Academy's concept, as a consultant, and stated the school could succeed only with a staff who had precisely the right human interaction skills. Hall developed an applied humanism model specifically for this school, including a screening survey for job applicants. With this screening, the school looked for staff who—

- Are not punishers. The Academy believes that its students will not be reached by systems
 of punishment, that many of its students have been punished in abusive fashions in the
 past, and that these youth live in a society inclined to punish people who demonstrate
 inappropriate behaviors. Students learn they are responsible for their own actions and
 words, which differs from imposed punishment.
- Respect the human rights of all students.
- Understand ways of nonviolent conflict resolution, and are able to lead students toward such resolutions when problems arise.

• Are appropriate adult role models. All students, sometime in adulthood, will face situations in which they will need to draw from characteristics they saw exhibited by past role models—in dealing with their own children, in the way they act at work, in decisions they make regarding drugs and alcohol.

These humanistic qualities have resulted in a school environment that has evolved from authoritarian to interpersonal. That, the Academy believes, is the basis needed for helping these youth see beyond the immediacy of their very real problems to develop a broader world view.

Beyond their human traits, Academy teachers have proven themselves to be educators capable of working in a school that is entirely individualized. The Academy stresses the importance of understanding all learning styles. Teachers have been extraordinarily inventive in working Lakota traditions into the curriculum, and in helping youth see a wide range of vocational options in a rural region where most adults see limited opportunities. In 1996, the Academy staff is made up of one director, one staff supervisor, one counselor, five teachers, and one aide.

Problems Encountered/Solutions

The development of coalitions and partnerships enabled Black Hills Careers Academy to take root and survive. Establishment of an Academy like this was beyond the resources of any single school district in western South Dakota. Public monies here are always in short supply, and the population is sparse. In South Dakota west of the Missouri River—35,000 square miles—there are 5.1 people per square mile. Twelve public school districts joined forces in 1980 to form Black Hills Special Services Cooperative, which has a mission to provide services that districts can not offer individually, and which is governed by a body of school board members representing each district.1 Black Hills Special Services Cooperative operates Black Hills Careers Academy. In fact, opening a school in 1981 for at-risk youth (virtually all of whom were affected by substance abuse) was among Black Hills Special Services Cooperative's first efforts. While the Academy traces its roots to that 1981 school, it bears little resemblance to it today. The Academy's emphasis on applied humanism, careers, and helping each individual experience success developed over time as administrators studied the needs of this population, examined the best professional thinking nationally, and adapted that thinking locally.

The same need to pool resources that brought the 12 school districts together has brought other human services providers into partnerships with the Academy. Currently the juvenile courts, the Bureau of Indian Affairs, and Federal Probation work with the Academy in reaching this student population. Also, the Black Hills area business community is part of an Academy partnership in which students study vocations and experience actual job placements. The Academy's careers education programming led to its being designated a Federal School-to-Work site in 1995.

Findings

Several indicators suggest that Black Hills Careers Academy is helping its students experience success:

- All students are achieving academically at least at an 80 percent level.
- During the 1994-95 school year, Academy students made NCE (normal curve equivalency) advances of 8.4 in total reading, 11.6 in reading comprehension, 2.6 in total math, and 9.3 in problem solving.
- All students are engaged in career exploration and entrepreneurial studies—including operating actual businesses.
- Teachers have noted decreases in aggression and absenteeism.

Recommendations

In a period where public funding everywhere for education and human services is tight, it can be easy for politicians and the public to overlook this particular population's needs. Students deemed "at risk"—whose lives have been shattered by dysfunctional adults and substance abuse—are seldom mentioned in discussions about educational excellence, school-to-work transitions, and technology's potential.

It is, therefore, crucial that the public know about programs like Black Hills Careers Academy, where students are finding success both academically and socially. The public must know that these youth can:

- Respond to adults who guide instead of punish.
- Make remedial progress after falling behind in school.
- Understand social values.
- Hope for a future career.

The danger is that the public will believe that this population has fallen beyond reach, and demand that limited funding be used to keep these young people separate from the mainstream instead of helping them prepare for the future.

References

Bendtro, L.K.; Brokenleg, M.; and Van Brockern, S. *Reclaiming Youth at Risk*. Bloomington, IN: National Educational Service, 1990.

Feuerstein, R. *The Dynamic Assessment of Retarded Performers*. Baltimore, MD: University Park Press, 1979.

Feuerstein, R. Teachers' Guides to the Feuerstein Instrumental Enrichment Program. Brooklyn, NY: SBI Enterprises, 1980.

Hobbs, D. Entrepreneurship and the Community. Columbia, MO: University of Missouri, 1988.

Internal Program Evaluation Techniques in an Adolescent Substance Abuse Treatment Program in Rural Illinois

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Abstract

The purpose of this internal evaluation study is to examine various characteristics of the Model Comprehensive Treatment Program for Critical Populations—Rural Youth of the Central East Alcoholism and Drug Council, in Charleston, Illinois. An eclectic evaluation design was utilized that examined program implementation efforts across three components of: (1) program implementation efforts; (2) client demographics; and (3) treatment issues. A program description of goals and attainments that could be utilized in service replication efforts is given. Methods of analysis included review of agency documents, analysis of demographic characteristics and symptom indicators of adolescent clients in the program, and quantitative analysis of Personal Experience Inventory (Winters et al. 1988) testing results. The testing data were gathered on a group sample of 30 adolescent clients who successfully completed the treatment program compared through discriminant analysis with a sample of 30 clients matched by age and gender who had voluntarily terminated services against staff advice. The results indicate a statistically significant relationship between a complex set of client characteristics and program completion outcomes. The program's successful attainment of goals beyond initially projected expectations is documented.

A growing trend in the substance abuse treatment field is the great concern for effectiveness, efficiency, and accountability of agencies that provide services. The increasing costs to society related to addiction have also been of concern. A recent study by Merrill et al. (1994) revealed over 70 conditions requiring hospitalization that are attributable in whole or in part to substance abuse, including tobacco. According to this study, males under 15 years of age with substance abuse as a primary or secondary diagnosis stay four times longer than those with no such diagnosis (16.4 days compared with 3.9 days). Females in the same age group stay almost three times longer (9.8 days compared with 3.6 days). The cost benefits of providing treatment services have also been documented in the literature. Gerstein et al. (1994) determined that for a cost of \$200 million for treating 150,000 individuals in California, benefits received during treatment and in the first year afterwards were worth approximately \$1.5 billion in savings to taxpaying citizens. According to the study, each day of treatment paid for itself (the benefits to taxpaying citizens equaled or exceeded the costs) on the day it was received, primarily through an avoidance of crime.

Treatment systems are currently burdened with inadequate fiscal resources to meet the existing demands for treatment. Of concern is a trend noted by Gfroerer (1994) that suggests that there are increasing rates of illicit drug use among youth and that their perceived risk of use of illicit substances is decreasing. Society's failure to concentrate significant efforts in understanding the treatment needs for the future for our young people will only bring disastrous results.

Purpose of the Evaluation

The literature lacks intensive analyses of the characteristics, clinical issues, and substance abuse patterns of rural youth in need of substance abuse treatment. Furthermore, minimal research exists that examines those characteristics of adolescent clients that might have predictive relevance to the course of treatment. According to Rog (1995), intervention programs are often developed in a political and social environment in which the human urgency for development of services precedes the explicit theoretical understanding of the problem or the intervention such that an appropriate goal for evaluation is to develop better understanding of the phenomena itself. Such has been the case in development of rural adolescent substance abuse services. The current study is an initial step in delineating the phenomena of adolescent substance abuse treatment.

The purpose of this study was to investigate the provision of substance abuse treatment services to youth in a rural outpatient setting through use of an internal evaluation design. The evaluation examined three elements of the Model Comprehensive Treatment Program for Critical Populations—Rural Youth of the Central East Alcoholism and Drug (CEAD) Council. The evaluation investigated (1) program attainment of goals; (2) demographic characteristics of the population that was served; and (3) client characteristics, including use patterns, concomitant issues, and tendencies predictive of early termination. According to Love (1991), the advantages of use of internal evaluation include the evaluator's firsthand knowledge of the organization's philosophy and policies and procedures. The internal evaluator can also communicate evaluation information to staff in a timely manner and participate in long-range planning.

Program Background and Description

CEAD Council is a community-based, not-for-profit corporation offering a full range of services to address chemical abuse and dependency in a four-county rural area of central East Illinois. Although the agency has provided traditional core programming for adolescents (as well as adults) since the early 1970s, the Adolescent Program has been significantly enhanced with multiple innovative program components through having been awarded a 3-year Federal grant from the Center for Substance Abuse Treatment.

Philosophy

The service philosophy of the agency as expressed in the original grant application included a conceptualization of programmatic development grounded in historical experience in the provision of treatment services to the target population and ongoing awareness of therapeutic techniques and theories as delineated in the research literature. Primary program innovations were precipitated by three guiding research foundations:

- Theories that explicate adolescent developmental factors related to decision making (Kohlberg 1964)
- Research drawing from ecological systems approaches (Hartford and Grant 1987; McLaughlin et al. 1985)
- Research examining "host" factors that increase risk of substance abuse (Pandina and Schule 1983; Hawkins et al. 1985).

Program enhancement goals and objectives were related to the above research and the agency's clinical experience in working with adolescents in the rural population.

Utilizing research concerned with adolescent development, the agency created age- and gender-specific group formats and contents.

Using research concerned with ecological systems, the agency created the Youth Leadership Center for enhancement of social support systems during treatment and in continuing care maintenance.

Using research regarding "host" factors, the agency developed enhanced family services, specialized linkage networking for outreach and ancillary services, enhanced assessment, and more holistic treatment services.

The Federal grant request for proposals had sought innovative strategies for the development of model treatment services for various segments of targeted populations. The CEAD Council had chosen to develop Outpatient Treatment services for adolescents and their families in the context of a rural community. To complement the traditional core adolescent treatment programming with the grant-provided program enhancements, the agency proposed the following five specific aims.

- Increase the clinical staff to allow greater accessibility of clinical staff to community referral sources for case finding, case coordination, and long-term care planning.
- Increase client accessibility to a broad spectrum of health, mental health, social, educational, vocational, primary medical care, HIV/AIDS services, and acute care through acquisition of qualified, specialized staff and consultants, as well as enhanced networking approaches to improve long-term client self-sufficiency and address overall client health.
- Make transportation to and from the treatment facility available to clients and families whose low income and rural location have previously complicated full engagement in treatment components, thereby negatively influencing program retention and recidivism as well as client relapse.
- Develop an innovative Youth Leadership Center for adolescent specific socialization, recovery
 maintenance, and/or recreational resources that will foster a therapeutic social milieu of
 recovering teens in order to devalue and eliminate drug use, reduce incidence of client conflict
 with the criminal justice system, and promote overall client health and self-esteem as well as
 decrease the negative social stigma associated with drug treatment services.
- Increase availability of family services, enhancing existing education and consciousness raising
 with state of the art family therapy services both separate from and conjointly with the
 adolescent client.

Evaluation Methods

An eclectic approach to the design of the evaluation was adopted to best obtain information that could be utilized by current program stakeholders for purposes of ongoing program improvement and for future potential replication projects. The evaluation questions included:

• Programmatic issues

Was the program implemented as planned? Could the program be replicated?

Demographics

What were the demographics of the population that was served?

Treatment issues

What patterns of addiction existed in the adolescent clients that were served?

Were there patterns of concomitant diagnoses present in the clinical population?

Was there a significant difference between those clients who successfully completed the program and those who voluntarily terminated services prior to program completion?

Methods for data gathering included the following: (1) a review of agency documents; (2) staff interviews and observations of program activities; and (3) quantitative data gathering and analysis that included a comparison of Personal Experience Inventory (Winters et al. 1988) testing results gathered on a matched group sample of 30 adolescents who successfully completed the treatment program compared through discriminant analysis with 30 adolescents who voluntarily terminated against staff advice.

Evaluation Results and Discussion

Programmatic Issues

WAS THE PROGRAM IMPLEMENTED AS PLANNED AND COULD IT BE REPLICATED?

Throughout the 3-year implementation period of the program enhancements, CEAD Council monitored accomplishment of program objectives through quarterly reports as well as various other evaluation measures. The reports included service statistics as well as fiscal accountability measures. A summation of the quarterly reports reflects the accomplishments of the program.

The original goals and objectives were categorized as a multi-focused strategy toward remediation in issues that had previously negatively influenced adolescent treatment access, therapeutic processes, and client retention. Each of the goals was correspondingly defined by various objectives, enhancement implementation efforts, programmatic aims, methodologies, and activities as the development of the project continued. Process evaluation measures included documentation of attainment of service statistics for each of the areas of remediation. A summary of the data from reporting periods of January 1, 1991, through March 31, 1993, is given below as an example of the program's attainment of objectives.

Access and Assessment

Case finding. The enhanced multidisciplinary staffing pattern of the grant award provided for a sufficient number and quality of staff to respond to needs for rapid assessments, assessments within schools and community settings, and extensive contacts with community and agency personnel to enhance early identification, intervention, referral, and education of significant community "gatekeepers." During the above stated time period, 700 community contacts were made by project staff. During that same time, screening and assessments were accomplished with 338 adolescent clients, of which 238 completed full admission processes and engaged in treatment services.

Transportation. The program had been targeted toward adolescent clients and their families in a rural four county area that covered approximately 2,100 square miles without the availability of public transportation. Program staff had reported that lack of viable transportation was frequently instrumental in creating client's early termination from treatment. Consistent utilization of the CEAD Council transportation services occurred during the reporting time period with a total of 1,729 uses of transportation to or from program services.

Physical Assessments. During the reporting period, 123 clients were seen by the CEAD Council Medical Director. Clients not seeing the CEAD Council Medical Director had regular physicians within the community or recent physicals from local care providers, and their issues pertinent to substance abuse treatment were reviewed by the Medical Director.

Psychological Assessments. A total of 428 cases were reviewed with a consulting psychologist. The consulting psychologist participated in weekly review sessions with the clinical staff of the program to offer input to specific case treatment planning, additional clinical supervision, and occasional inservice training.

Treatment Process

Staff additions. The staffing complement of the program was increased by the equivalent of six FTE positions. The grant allowed a more multifaceted staff to meet the multiple treatment needs of adolescents, including biological/physical, psychological, informational, vocational, educational, social, cultural, and adjunct issues needing attention within the primary addiction services. Having the additional staff capabilities also influenced enhanced age-specific programming and extensively increased family involvement in the program. Prior to the enhanced programming, less than 10 percent of the clients had significant family involvement in any area of their treatment programming. Family issues had been frequently identified as a problem area in clinical supervision meetings. Through the enhanced staffing, weekly joint family therapy groups as well as weekly gender-specific therapy sessions were added to the program. The core program, which had included one therapy group per week and an individual counseling session, was expanded to a daily availability of multidimensional programming from which counselors could individually tailor treatment planning on an ongoing basis as clients and families progressed through recovery.

The original grant application did not call for an increase in numbers of clients to be served by the program, but was rather a mechanism to increase the level of intensity of services offered to the same number of people as had been the program's normal experience. However, as the program developed and matured through the grant cycle, increased clients and family members were readily subsumed into the program without adding measurably to the program costs. As can be seen in table 1, a comparison of projected to actual services reveals an increase in services provided over the original expectations.

	Table 1. C	omparisons of act	ual and projected clients	
	Projected	l and actual client	s sceened and assessed	
	Projected	Actual	Additional actual family assessments	Total
Year 1	60	74	66	140
Year 2	116	158	98	256
Year 3	116	160	104	264
			1	<u> </u>
Total	292	392	268	660
	Projected and a	ctual clients enga	ging in the treatment process	
	Projected	Actual	Additional actual families in treatment	Total
Year 1	50	66	40	106
/ear 2	89	117	45	162
Year 3	89	127	54	181
			•	•

In summary, a review of the process evaluation measures revealed that the program had met objectives as planned. Additionally, the program exceeded projected figures for numbers of clients to be served without any additional increases in program staffing patterns or funding. The attainment of the goals and objectives of the program with the addition of exceeding annual projections of clinical services is an indication that similar programs could be implemented in other locations. The program staff complied with and exceeded activities specified in their goals. With appropriate fiscal resources for sufficiently qualified staff and the additional equipment/facility resources such as were made available through Federal funding, it appears that similar programmatic structures could be replicated and implemented in other areas.

Demographics

WHAT WERE THE DEMOGRAPHICS OF THE POPULATION THAT WAS SERVED?

A sample of 97 records was reviewed and data were gathered regarding demographic information taken from the client application forms. The application forms included multiple demographic questions that revealed characteristics of the population that was served.

The average age of clients was 17.4 years with ages in the sample group as follows: 10-15 years, 14.4 percent; 16 years, 19.6 percent; 17 years, 15.5 percent; 18 years, 19.6 percent; 19 years, 16.5 percent; and 20-22 years, 14.4 percent. The primary racial group was Caucasians, with one American Indian, three Hispanics, and two clients from other racial groups represented in the sample. Clients were 77.3 percent males and 22.7 percent females. Most of the clients (85.5 percent) lived with their family. Low income was a pervasive issue in the sample, with about two-thirds of the families (66.3 percent) having an annual income of less than \$7,401; 17.9 percent had incomes between \$7,401 and \$19,644.

While about a third of the families did not report a source of income, 45.3 percent indicated having some income through wages or salary and 22.1 percent indicated receiving some form of public assistance or other source of income. In reporting their employment status, 63.9 percent of the clients were currently enrolled students, while 14.4 percent reported being employed on a full or part time basis. Almost 10 percent of the sample had not yet even begun high school and were already in need of substance abuse treatment. About 2 percent of the sample had completed 2 years of college, but the largest representation was the 88.6 percent that had completed somewhere between the 9th and 12th grades.

A large proportion of these adolescents had already found themselves in trouble with the legal system: 67.7 percent had previous arrests of from 1 to 5 times and 5.4 percent had been arrested between 6 and 10 times; 26.9 percent had never been arrested. Even with the multiple indicators of problems existing in the lives of these adolescents, 61.5 percent reported that they had never previously received treatment, while 34.4 percent had been in treatment one or two times prior to their current admission and 4.1 percent had been in treatment for from three to five prior admissions. Multiple referral sources had facilitated the adolescents' entry to treatment with the primary source of referral from the courts at 47.9 percent. Other referral resources included hospitals/physicians, Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), State

Corrections, family, self, schools, Protections and Advocacy, the Department of Children and Family Services, and TASC.

The data discussed in this section were gathered in the first admission interview with the clients. We frequently found that later clinical interviews reported far greater instances of substance use and abuse than had been revealed in either the admission interview or in the standardized testing. It appeared that as the clients became better acquainted with treatment and the clinical staff, they became more open about more extensive use patterns than had been revealed at admission. Keeping in mind this potential minimization of reporting, a full 50.8 percent of the clients who answered the question on first use of substance—63 of 97 clients—reported that they initially had begun use of substances at or below the age of 13. Another 41.2 percent began their substance use at or below the age of 16. Put in the context of adolescent development, by the time these adolescents were just able to begin driving, 92 percent had begun use of substances.

Substances that were reported as being the "primary substance of choice" included: alcohol, 72.9 percent; marijuana, 19.8 percent; amphetamines, 5.2 percent; PCP, 1 percent; and inhalants, 1 percent. The reported frequency of use for the primary substance of abuse was categorized as follows: No use during the preceding month, 29.2 percent; less than or once per week, 40.6 percent; and several times a week through more than three times daily, 30.2 percent. Additionally, 66 of the clients also reported a secondary substance of abuse as follows: marijuana, 53 percent; alcohol, 33.3 percent; amphetamines, 10.6 percent; and inhalants, 3 percent. Frequency of use of the secondary substance of choice was as follows: no use in the preceding month, 37.9 percent; less than or once per week, 25.8 percent; several times a week through more than three times daily, 33.3 percent; and frequency unknown, 3 percent.

The demographic information of these clients is indicative that rural America has not escaped the problems of substance abuse among adolescents. The treatment program is located in a primarily rural area within a central Illinois four-county catchment area of approximately 2,100 square miles and a population base of about 107,000 people. The two largest towns in the area have less than 20,000 people, and the closest metropolitan area of 50,000 or above population is over 50 miles away from the major population centers of the program.

Treatment Issues

Examination of the treatment issues was handled by data analysis of psychological testing using the Personal Experience Inventory (PEI) (Winters et al. 1988) that is completed on all clients entering the program. First, a sample of 30 records of clients who had voluntarily terminated services against staff advice prior to program completion was chosen. A matched sample by age and gender of 30 client records was then chosen to be the comparison group who had successfully completed program services. Length of stay in program services for the entire sample varied from 8 to 363 days of enrollment with an average length of stay of 128 days. Initial expected length of stay in program services is determined at the beginning of treatment based on clinical needs and was documented in the treatment plans of the client records. Determination of early termination and or successful program completion is assessed by the counselors at the time of discharge, approved by the clinical supervisor, and documented in the

discharge summary. Due to the low number of early terminations, records were chosen throughout the 3-year duration of the grant program enhancements.

WHAT PATTERNS OF ADDICTION EXISTED IN THE ADOLESCENT CLIENTS WHO WERE SERVED?

The substance abuse scales of the PEI classify reported usage patterns of the following substances: alcohol, marijuana, LSD, PCP, cocaine, amphetamine, Quaalude (methaqualone), tranquilizers, heroin, opiates, and inhalants. The usage patterns examined for this study include those reported as having been used in the past year and those in the past 3 months.

We noted that frequently the clients' scores on this subset of items indicated lower reported patterns of usage than that which was reported in the initial clinical assessment process or in later progress notes.

The usage patterns shown in table 2 reveal significant substance abuse among the 60 clients and widespread abuse of multiple substances, which is not the common perception of "rural America." Unfortunately, it appears that the societal misconception of rural areas being less affected by substance abuse than the urban counterparts is quite inaccurate according to the testing reports of these adolescents. Of equal concern is that the average age of this sample of clients was 16; ages ranged from 13 to 19. The average age of the first use of substances was 13; ages of first use ranged from 5 to 16. In this samples, 16.7 percent reported their age of initial use to be at or below the age of 11.

Table 2. Percentage of clients using substances by time frame and frequency				
Substance used	In past 3 months	In past year	20+ times in 3 months	20+ times in past year
	-			
Alcohol	66.7	96.7	10.0	36.6
Marijuana	41.6	65.0	6.6	20.4
LSD	8.3	20.0	_	6.6
PCP	_	5.0	_	_
Cocaine	1.7	10.0	_	_
Amphetamines	10.1	25.0	1.7	1.7

Quaalude(Methaqualone)	1.7	3.4	_	3.3
Barbiturates	_	7.7	_	_
Tranquilizers	1.7	3.4	_	1.7
Heroin	_	_	_	_
Opiates	3.4	9.4	_	_
Inhalants	5.1	28.3	_	6.6

WHERE THERE PATTERNS OF CONCOMITANT DIAGNOSES PRESENT IN THE CLINICAL POPULATION?

The individual client profiles on the PEI denote six scales that encompass various psychological concomitant issues. The results of examination of these scales across the full sample of clients are shown in table 3.

	Indicator for psychiatric/psychological		Referral indicator for physical abuse	
	Frequency	Percent	Frequency	Percent
Yes	13.0	21.7	13.0	21.7
No	47.0	78.3	47.0	78.3
	Indicator for eating disorder		Indicator for family chemical dependency	
	Frequency	Percent	Frequency	Percent
Yes	5.0	8.3	32.0	53.3
No	17.0	28.3	27.0	45.0
Missing	38.0	63.3	1.0	1.7
	Indicators for sexual abuse		Indicators for suic	ide potential

	Frequency	Percent	Frequency	Percent
Yes	12.0	20.0	12.0	20.0
No	47.0	78.3	47.0	78.3
Missing	1.0	1.7	1.0	1.7

Although a full 20 percent of the subjects attested to scaled items on many subtests, by far the most predominant concomitant psychological issue was chemical dependency in the family. Such information is consistent with the literature in the substance abuse field that has traditionally considered genetic elements to enhance risk factors among the children of alcoholics. With the current shortage of treatment availability for both adults and adolescents, the occurrence of the high incidence of reported familial addiction is of greater concern for the future. If treatment availability continues to lag painfully behind the demand for services, it is predictable that the problems evidenced by these adolescents will only be repeated in the years to come in the next generations. Additionally, the data revealed disturbing rates of concomitant problems among these adolescents that further enhance their needs for treatment. The significance of family involvement in the treatment process is underscored by these data. The likelihood of significant changes in the adolescents' lives is certainly more at risk if dysfunctional families are not also brought into the treatment process for the needed opportunities for recovery of the whole family constellation.

IS THERE A SIGNIFICANT DIFFERENCE BETWEEN THOSE CLIENTS WHO SUCCESSFULLY COMPLETED THE PROGRAM AND THOSE WHO VOLUNTARILY TERMINATED SERVICES PRIOR TO PROGRAM COMPLETION?

The final question for this evaluation was concerned with examination of the PEI testing results to determine if significant differences were present among those clients who successfully completed the treatment program and those who voluntarily terminated against staff advice. Client retention problems have frequently been noted in the treatment field literature and have presented issues of concern for practitioners. The clinical staff of the Adolescent Program had wrestled with this issue in their staff meetings regarding program quality assurance even though their client retention rates across the 3-year time span were frequently higher than those quoted in the general substance abuse field literature (which quotes early termination rates of anywhere from 20 to 50 percent as not uncommon for adults and higher expectancies for adolescent programs). If the program evaluation was able to determine client characteristics that differentiated potential ASA clients from program completers, the utilization of evaluative results could be enhanced by the existing staff interest in this question.

A sample of 30 client records of male and female adolescent clients who had voluntarily terminated program services was matched by age and gender with a same size sample of clients who had successfully completed program services according to their individualized treatment

plan. The PEI is delineated into various categorical areas (Validity Scales, Basic Scales, Clinical Scales, Substance Abuse Frequency Scales, Personal Risk Factors, and Environmental Risk Factors) that—other than the validity scales—are each then further defined by various subscale groupings. Additionally, each individual client profile of testing results classifies potential concomitant clinical issues such as sexual abuse, familial chemical dependency, and suicide risk, among other issues that were discussed in the section on concomitant disorders.

Data were obtained from each of the client records using the T-score given in the individual client profile. Each client profile gives T-scores as compared with a normative group of high school students or a normative group based on chemical dependency drug clinic adolescents. The T-scores based on the high school students normative group were chosen for this analysis as perhaps being more sensitive to the outpatient sample of clients seen by the program, many of whom may have been in early stages of addictive patterns and still been eligible for program services. T-scores were recorded across each of the subscales for a total variable pool of 61 clinical subscales, 6 validity scales, and a variable for whether or not the client was a currently enrolled student. Discriminant analysis was utilized to obtain the differentiating characteristics of the two groups. The discriminant analysis obtained a canonical correlation value of R=.92, d.f.=30, p=.0000.

The data revealed significant differences between the two groups to obtain predictive group membership of 100 percent. Characteristics of each of the two groups as delineated in the discriminant analysis are portrayed in table 4. The characteristics have been ranked in order of the magnitude of the standardized canonical discriminant function coefficient. Although all scales that contributed to the equation are listed, those scales that contributed minimally (standardized coefficient of < +1.00) have been noted with an asterisk.

Gleaning meaningful information for use by practitioners from the above data is complex due to the multiple characteristics determined as significant in the discriminant analysis equation. Attempts to reduce the characteristics to the top five, and/or to categorize by substance use patterns only or clinical scale indicators only, created reduced levels of prediction available in the equation and much greater probabilities of incorrectly assigning group membership. The indicators listed in table 4 are evidence of the complexity faced by practitioners in their attempts to complete accurate clinical assessments, match clients with the appropriate treatment levels of care, and to be able to predict potential tendencies toward early termination.

Table 4. Discrimination analysis of group characteristics			
Early terminations (ASA Group)	Program completers (PC Group)		
Opiates in past year	Amphetamines in past year		

Personal involvment with drugs	Transituational drug use
Cocaine in past year	Opiates in past 3 months
Inhalants in past year	Cocaine in past 3 months
Amphetamines in past 3 months	PCP in past year
Alcohol in past 3 months	Psychiatric referral indicated
Psychosocial infrequency response bias	Inhalants in past 3 months
Peer chemical involvement*	Clinical preoccupation with use
Personal risk-social isolation*	Scale 1 infrequency bias
Psychosocial dependence response bias*	Loss of control
Barbiturates in past year*	Marijuana in past 3 months*
Personal risk-deviant behavior*	Sexual abuse indicator*
	LSD in past year*
	Scale 1 Dependence response bias*
	Personal risk-Rejecting convention*
	Personal risk-Spiritual isolation*
	Currently a student*

^{*}Minimal contribution to the equation (see text). All characteristics p<.005.

The characteristics of the ASA group (the early terminators) suggest an increased likelihood of early termination in adolescents who have used multiple substances in the past year, including opiates, cocaine, inhalants, and barbiturates, but are more likely to have used only amphetamines and alcohol in the past 3 months prior to treatment. It is likely that these clients have extensive personal involvement with drugs, suggested by using at inappropriate times such as early in the

morning or at school; they probably use for psychological benefit and restructure activities to accommodate use. Their response to testing may indicate questionable validities in results and high indices of defensiveness. Adolescents in this group would tend to associate with chemical abusing peers; however, they probably perceive high levels of social discomfort, incompetence, and feelings of mistrust toward others. They would tend to be socially isolated and feel socially inept. Adolescents in this group would also be more likely to have participated in unlawful, delinquent, or oppositional behavior.

Adolescents in the Program Completers group also present a fairly complex picture of clinical need. In differentiating between the two groups, the clinical similarities of the entire population should be kept in mind, in that both groups are by definition adolescents who had been involved in substance abuse outpatient treatment. It is not as if the comparison is between adolescents in treatment and those who present without dysfunctional symptomatology or comparison between significantly differing levels of pathology along the continuum of chemical dependency progression. The group differentiations are derived characteristics from a supposedly homogenous subpopulation of adolescents.

Suggested characteristics of the Program Completers group include similar multisubstance use patterns in the past year of such substances as amphetamines, PCP, and LSD, but much more extensive use of substances in the 3 months prior to treatment, including opiates, cocaine, inhalants, and marijuana. This group is characterized by more extensive severity symptoms of chemical dependency, including transituational drug use, loss of control, and clinical preoccupation with drug use. Adolescents in this group are more likely to have high scores in the indicators for psychiatric referral and to have been victims of sexual abuse. They may also show symptoms of response biases in infrequency and defensiveness. Adolescents in this group may be likely to reject convention, fail to endorse traditional beliefs about right and wrong, and tend toward antisocial and unconventional moral beliefs. These adolescents tend toward absence of spirituality, spiritual beliefs, and the use of prayer in their life. This group is more likely to be comprised of currently enrolled students.

Another interesting comparison that can be derived from the total psychological characteristics of each of the two groups is that the ASA characteristics tend toward external interpersonal elements while the PC characteristics are more of an internal intrapersonal nature. Additionally, the differences in substance use characteristics between the two groups show increased recent use of multiple substances in the PC group, as well as characteristics of more extensive chemical dependency patterns such as loss of control and clinical preoccupation with drugs.

Perhaps what the Adolescent Program has begun to discover is empirical evidence of that which substance abuse practitioners have intuitively known for years as "readiness" or "hitting bottom." Could it be that the internal emotional struggle as the disease of chemical dependency progresses—as opposed to external problems that signify initial stages of abusive patterns—is composed of such significantly dichotomous processes that ASA/PC group memberships can be predictable? Can corresponding interventions be created to intervene in tendencies toward ASA prior to early program termination and further progression of the illness process? Is it the lesser amount of internal struggle and crises in the ASA group that has reduced their motivation to

complete program services? Will further progression of the illness within these individuals reflect corresponding similarities to the PC group?

The internal evaluation of this program reflects extensive levels of program goal attainment, a delineation of program enhancements and client demographics, and an explication of characteristics of significant group predictability between early terminations and program completers. Multiple avenues for further research, including larger samples and questions of relevance to practitioners, the scientific community, and State and Federal policymakers, are suggested by this study.

Recommendations

The various data gathering mechanisms utilized in this study revealed high levels of program accomplishment. The program met or exceeded its original program expansion goals. Staff were cooperative and interested in the evaluation study as well as hopeful about continuing program improvements. A major barrier to ongoing provision of successful services occurred with the expiration of the Federal funding at the end of the 3-year demonstration period. Replacement funding that had originally been expected from State mechanisms also was not available. Although no ready source of funding to continue the program at full capacity with the multiple enhancements was available, the Board of Directors of the agency supported continuation of a reduced structure program that retained many of the critical enhancements such as the Leadership Center and transportation. The agency continued to seek replacement funding, as community need for service was not reduced.

The complex patterns and issues suggested by this analysis call into question the trend toward simplistic screening devices as opposed to thorough assessment. Further avenues of research are suggested by this study that could assist in bridging the gap between practitioners and the scientific community. For too long, practitioners in the substance abuse field have been left without viable evaluative research to assist in their understanding of potential program improvements or to give them opportunities for replication of models that show promise. It is hoped that this study is a step in the right direction for a future that elucidates greater understanding of the complex nature of substance abuse and recovery for adolescents.

References

Gerstein, D.R.; Johnson, R.A.; Harwood, H.J.; Fountain, D.; Suter, N.; and Malloy, K. *Evaluating Recovery Services: The California Drug and Alcohol Treatment Assessment* (*CALDATA*). Sacramento, CA: California Department of Alcohol and Drug Programs, Resource Center, 1994.

Gfroerer, J. Advance Report No. 10: Preliminary Estimates from the 1994 National Household Survey on Drug Abuse. Washington, D.C.: Substance Abuse and Mental Health Services Administration, 1995.

Hartford, T.C., and Grant, B.F. Psychosocial factors in adolescent drinking contexts. *Journal of Studies on Alcohol* 48:551-557, 1987.

Hawkins, J.D.; Lishner, D.; and Catalano, R.F. Childhood predictors and the prevention of adolescent substance abuse. NIDA Research Monograph No. 56. *Etiology of Drug Abuse: Implications for Prevention*. Rockville, MD: National Institute on Drug Abuse, 1985. pp. 75-126.

Kohlberg, L. Development of moral character. *Review of Child Development Research*, Vol. I. New York: Russell Sage Foundation, 1964.

Love, A.J. *Internal Evaluation: Building Organizations From Within*. Newbury Park: Sage Publishers, 1991.

McLaughlin, R.J.; Baer, P.E.; Burnside, M.A.; and Pokorny, A.D. Psychosocial correlates of alcohol use at two levels during adolescence. *Journal of Studies on Alcohol* 46:212-218, 1985.

Merrill, J.; Fox, K.; and Chang, H. *The Cost of Substance Abuse to America's Health Care System.* Report 1: Medicaid Hospital Costs. New York: The Center on Addiction and Substance Abuse at Columbia University, 1994.

Pandina, R.J., and Schule, J.A. Psychosocial correlates of alcohol and drug use of adolescent students and adolescent clients in treatment. *Journal of Studies on Alcohol* 44:950-973, 1983.

Rog, D.J. Reasoning in evaluation: Challenges for the practitioner. *New Directions for Evaluation* 68:93-100, 1995.

Tatsouka, M.M. *Discriminant Analysis: The Study of Group Differences*. Champaign, IL: Institute for Personality and Ability Testing, 1970.

Winters, K.C.; Henly, G.A.; Rauch, J.; and Huba, G.J. *Personal Experience Inventory*. Los Angeles: Western Psychological Services, 1988.

Designing Effective Alcohol Treatment Systems For Rural Populations: Cross-Cultural Perspectives

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Abstract

Treatment delivery systems have often been based on a therapy ethos which assumes that people are unable to resolve their problems without professional treatment whereby a therapist uses

special knowledge, insights, or techniques to change the recipient of services. This assumptive system poses a quandary in serving diverse rural populations with multiple barriers to intensive therapy. Recent substance abuse treatment findings, reviewed in this paper, question the validity of the therapy ethos, even in urban contexts. Alcohol problems occur along a continuum and respond to interventions that vary widely in intensity and content. In studies ranging across many cultures, relatively brief consultations of from one to three sessions have been shown to trigger change that may be similar in magnitude to the effects of more extensive treatment. Such consultation can be integrated into routine healthcare, employment, or pastoral care systems. Effective interventions through mail and telephone consultation have also been demonstrated. Contrary to stereotype, a warm and empathic counseling style has been found to be superior to more aggressive confrontational approaches. Consultation that is supportive and empowering may often trigger change, and can be delivered without the cost and disruption of removal to a remote treatment center. Research is needed to discover change strategies that are appropriate and effective for specific cultural populations. Relatedly, there is a need for greater attention to the community context within which substance abuse occurs, and to local culture-specific resources that can stimulate and support change.

Alcohol treatment delivery systems are changing rapidly in the United States. There has been a dramatic shift in professional conceptions of alcohol problems, emphasizing a continuum of severity rather than a distinct and unitary disease (Institute of Medicine 1990). Managed care and health care cost containment pressures have substantially shortened the average length of care, and required a rapid shift away from residential and hospital-based programs. The treatment of alcohol problems is more closely integrated with mental health services and is increasingly delivered by degreed professionals rather than recovering paraprofessionals. The rapid growth of scientific knowledge has contributed new treatment methods and information about their effectiveness (Hester and Miller 1995).

Greater attention is also being paid to the matching of individuals with optimal treatment approaches (Mattson et al. 1994). There is growing consensus that a "one size fits all" treatment is inadequate to meet the needs of diverse populations. Treatment systems offer targeted services and even separate programs for "special" populations including women, racial/ethnic minorities, gays and lesbians, adolescents, and the elderly (Erickson et al. 1996).

A difficulty here is that the current scientific literature provides few data to guide the tailoring of treatment to such special populations. A few studies reflect the potential benefit of specialized services for women (e.g., Dahlgren and Willander 1989; Sanchez-Craig et al. 1991). No controlled trials to date have demonstrated superior differential outcomes of certain treatments for specific groups defined by age, ethnicity, or sexual preference. How, then, should one proceed in designing treatment systems to serve specific or diverse populations?

The reflections contained in this paper were occasioned by an invitation to address a conference, "Addressing Alcohol-Related Problems in Alaska," convened in Anchorage in 1995 under the sponsorship of the National Institute on Alcohol Abuse and Alcoholism. The subject was, in a way, daunting, because virtually no outcome studies have been published on the treatment of alcohol problems among Alaskan people.

At the same time, the challenge proved stimulating, because it raised many questions about how the vast current literature on alcohol treatment effectiveness might be applied in developing optimal treatment systems for this relatively unstudied and largely rural/frontier population. That is the principal topic of this article. We first consider major trends in the clinical research literature that have implications for designing treatment systems for special or culturally diverse populations. These are then integrated to derive recommendations for serving rural populations in particular.

The Nature of Alcohol Problems

Before designing treatment, it is wise to consider the phenomenon being treated. There are major cross-cultural differences not only in patterns of drinking and its consequences (Helzer and Canino 1992; Maula et al. 1990; Single et al. 1981), but also in conceptions of the nature of alcohol problems (Bennett et al. 1993; Legge and Sherlock 1991; Sigelman et al. 1992).

From the 1960s through the 1980s, popular and professional conceptions in North America (and to a lesser extent in Europe) focused heavily on "alcoholism" as a unitary disease, qualitatively distinct from normality, consisting of an irreversible biologically rooted incapacity to regulate one's own use of alcohol (Heather and Robertson 1983; Milam and Ketcham 1981; Miller 1993).

A progression of symptoms of alcoholism was described by Jellinek in 1952, based on interviews with over 2,000 male members of Alcoholics Anonymous. Attempts to replicate Jellinek's syndrome met with some success when the population consisted of American white males (Park and Whitehead 1973). Greater divergence was found when males were studied in Finnish (Park and Whitehead 1973) and Navajo cultures (Willoughby 1995). When samples of women have been studied (all of Jellinek's respondents were male), convergence with Jellinek's progression has been modest at best for American women (James 1975; Piazza et al. 1986), and virtually zero with Navajo women (Willoughby 1995).

Jellinek himself renounced this unitary model of alcoholism in 1960, proposing instead a variety of kinds of alcohol problems, and supporting a broad generic definition of alcoholism as any drinking that inflicts harm—a definition ultimately adopted by the World Health Organization (1952) for its cross-cultural generalizability. It was, in fact, to the adverse consequences of excessive drinking that Magnus Huss (1849) referred in coining the term *alcoholism*.

The diagnostic label of "alcoholism" was formally replaced by "alcohol abuse" and "alcohol dependence" in 1980 and no longer appears in the *Diagnostic and Statistical Manual of the American Psychiatric Association* (1994), a change also reflected in the International Classification of Diseases.

Recent influential writings on prevention and treatment have favored the still more generic term "alcohol problems" (Institute of Medicine 1990). The picture that emerges is one of substantial diversity, continuously distributed along not one but several dimensions of severity of alcohol involvement (Miller, Westerberg, and Waldron 1995). It is reasonable to expect, therefore, that no single treatment approach is likely to suffice in addressing such diversity, and that is precisely what the outcome literature indicates.

The Efficacy of Treatment Modalities

No blanket pronouncement of treatment effectiveness can be given (Institute of Medicine 1990). Dozens of different treatment methods for alcohol problems have been tried, and many of these have been tested in formal clinical trials. The result is substantial evidence that some treatment methods are effective, others show promise, and still others seem to exert little or no beneficial impact on excessive drinking and related problems. The good news is that *there is an encouraging array of different treatment methods with evidence of efficacy* (Miller, Brown et al. 1995).

From a cross-cultural perspective, however, it is worrisome that the vast majority of treatment outcome studies have been conducted with urban white English-speaking populations of European heritage. A very few reports have provided systematic outcome data regarding the treatment of alcohol problems in Hispanic (e.g., Arciniega et al. in press; Szapocznik et al. 1986), Asian (e.g., Kua et al. 1990), black (e.g., Miller and Verinis 1995), Native American (e.g., Ferguson 1970; Shore and von Fumetti 1972; Wilson and Shore 1975) or other indigenous peoples (e.g., Kahn and Fua 1992). Similarly, few controlled trials have been conducted with rural populations (e.g., Sanchez-Craig et al. in press), or with adolescents (e.g., Carpenter et al. 1985) or elderly individuals (e.g., Frederiksen 1992; Graham et al. 1995). To what extent are findings from the large English-language mid-adult alcohol treatment outcome literature generalizable to other groups?

It seems at least reasonable, in searching for effective treatment methods to include in a service delivery system, to begin with approaches that have been shown to have specific efficacy in other settings. If one is treating pneumonia, established antibiotics are a good start even though controlled trials may not have been published for the specific subgroup to which the patient belongs. It seems *improbable* (though by no means impossible) that a treatment method with well-demonstrated efficacy for adults in their twenties, thirties, and forties will somehow lose its effectiveness with people younger than 20 or older than 50. Similarly, a treatment or medication found to be inert in two dozen controlled trials is unlikely to spring suddenly to life when applied with people from a different culture, though again it is not unimaginable.

Another fruitful avenue is to ascertain important causal factors in effective treatment. Why do apparently effective treatments work? An understanding of the mechanisms underlying efficacious treatment methods may suggest culture-specific strategies. For example, one of the most consistently supported treatments for alcohol problems is social skills training. The specific content of such training as practiced in urban North America is unlikely to transfer well to indigenous villages of Alaska, Fiji, Mexico, or Africa. Yet the underlying principle is more likely generalizable: that sobriety is promoted by having rewarding interpersonal relationships and ways of spending time that do not involve drinking (Meyers and Smith 1995). If this principle holds across cultures, then the question becomes one of how best to promote social support for sobriety and nondrinking activities within the local context. This may involve individual training, but might equally involve systematic changes in the social environment.

Evidence on Cost-Effectiveness

There is a surprisingly robust finding that is of immediate importance in designing rural treatment systems, and that seems to hold up well across cultures. This is the finding that *even relatively brief counseling, when done properly, can have a beneficial effect on problem drinking.* A rapidly growing literature, now numbering over three dozen trials from at least 14 different nations, shows encouragingly large changes in drinking after brief counseling of from one to three sessions (Bien et al. 1993; Miller, Brown et al. 1995). Brief, personally empowering counseling has been shown to be substantially more beneficial than placing a person on a "waiting list" for services (Harris and Miller 1990; Miller et al. 1993; Miller and Sanchez 1994). It appears, in fact, that putting someone on a waiting list is an implicit instruction to wait that is, not to change until services can be provided.

A puzzling finding is that when such brief interventions have been compared with more extensive forms of treatment, studies have often found relatively little difference in long-term outcomes (Bien et al. 1993; Holder et al. 1991). That is, the amount of benefit that follows from well-delivered brief counseling is often found to be comparable to that related to longer courses of treatment. This parallels the finding of few differences in the long-term overall effectiveness of more intensive (e.g., inpatient) versus less intensive (e.g., outpatient) treatment (Holder et al. 1991; Institute of Medicine 1990; Miller and Hester 1986). Though unsettling in a way, this finding is also encouraging because (1) substance abuse clients often fail to stay for more than a few sessions, even when more treatment is available; (2) public treatment systems are often unable to provide prompt extended treatment to all who present for services; and (3) managed care and other health economic constraints are reducing the length of service normally provided. Furthermore, some health service settings (such as employee assistance programs and primary care clinics) are inherently limited in the length of time that can be devoted to alcohol counseling. The hopeful message is that even within such constraints, it is possible to deliver beneficial services (Miller et al. 1994).

Cultural and geographic constraints may also favor relatively brief counseling. Sanchez-Craig and her colleagues (in press) demonstrated the feasibility and efficacy of brief telephone counseling for alcohol problems among rural residents of the sparsely populated province of Ontario. Brief consultation to reduce drinking and related problems can be effectively delivered by health professionals and integrated into routine health care (Heather 1995).

Again, a key question is *why* and *how* such brief interventions work. Although there is considerable consistency in the cross-national content of effective brief interventions studied to date (Bien et al. 1993), the mechanism of their efficacy remains unclear. One possibility is that such interventions trigger internally motivated change by helping the drinker to resolve ambivalence about alcohol and to reach a clear decision to change (Miller and Rollnick 1991). In our study of change strategies used by alcohol dependent Navajo people, the making of a clear decision to change emerged among the final (rather than early) steps, often years after sampling a variety of strategies including AA attendance, professional treatment, and hospitalization (Willoughby 1995). If a clear personal commitment is a key and decisive factor in triggering change, the efficacy of brief interventions (and the finding of similar impact to more extensive treatment) becomes more comprehensible. In designing intervention systems, then, it would be prudent to attend to this motivational issue as an important and early element of intervention, and the question becomes how best to do this within the local culture or target population.

The Impact of Therapist Characteristics

Another noteworthy finding in the planning of alcohol treatment systems is that caregivers have a substantial impact on outcomes. Early research on the determinants of client dropout ascertained that therapists vary widely in their retention of clients (Miller 1985). Some therapists lost few of their clients, whereas others accounted for a significant percentage of lost cases. The same turns out to be true of substance abuse treatment outcomes. Clients assigned at random to different counselors show markedly different rates of improvement (Najavits and Weiss 1994). It matters who is delivering alcohol services.

What accounts for these differences in therapist effectiveness? American programs have historically given priority to the hiring of counselors who identify themselves as recovering alcoholics. Is personal recovery status a predictor of therapists' success? Here we encounter another strikingly consistent finding. From more than 50 studies addressing this question, McLellan and his colleagues (1988) found no evidence that recovering counselors produce any better (or worse) outcomes when compared with therapists not in personal recovery. Health caregivers need not be recovering people themselves in order to be effective substance abuse counselors. Recovery status appears to be unrelated to counseling success, and it makes no more sense to rely upon former patients as counselors in this field than in the treatment of depression, schizophrenia, diabetes, or marital problems.

Level of empathic skill, however, does appear to be a robust predictor of therapist success. In a prospective study, Miller and colleagues (1980) found that therapist empathy accounted for two-thirds of the variance in client outcomes at 6 months, and even 2 years later empathic skillfulness significantly predicted greater improvement on drinking measures (Miller and Baca 1983). Valle (1981) similarly found that interpersonal skillfulness (e.g., warmth and empathic listening) accurately predicted relapse rates among clients randomly assigned to therapists. Conversely, confrontational counseling styles have been associated with increased client resistance and poorer client outcomes: The more a therapist confronts, the more the client resists change (Patterson and Forgatch 1985) and continues to drink (Miller et al. 1993). Confrontational treatments in general have compared unfavorably with other therapeutic approaches (Miller and Rollnick 1991; Miller, Brown et al. 1995).

The extent to which this finding will generalize across cultures remains to be determined. The current data at least suggest caution in exporting traditions of hiring former patients and employing aggressive confrontational intervention tactics. The selection of caregivers appears to be one of the more important decisions made in constructing treatment systems, and it is sensible to use, as criteria in hiring, those counselor attributes found to be associated with more favorable client outcomes.

Treatment Matching

In serving any diverse population, it is sensible to include a menu of different treatment strategies, emphasizing approaches with sound evidence of efficacy. Once one has a range of

alternative services for diverse clients, however, how does one decide which methods to offer to which individuals? This is the challenge of client-treatment matching.

An encouraging literature already exists to suggest that different kinds of clients benefit from different treatment methods (Mattson et al. 1994). Relatively little is known, however, about the optimal strategies for matching individuals with options. As research evidence accumulates, some clear empirical guidelines may emerge for choosing among specific alternatives. Kadden and his colleagues (1989), for example, found that individuals with comorbid alcohol dependence and antisocial personality disorder responded more favorably to cognitive-behavioral coping skill training than to supportive-expressive psychotherapy. Yet the range of potentially relevant client attributes is vast, and there is a substantial menu of treatment options from which to choose (Hester and Miller 1995). It will be difficult indeed to establish objective matching criteria to address such complexity. Therapist judgment is notoriously unreliable in clinical prediction (Wiggins 1973), often heavily biased toward one approach (Hansen and Emrick 1983), and there is no persuasive evidence that therapist-mediated matching improves over chance or natural selection processes. An empowering alternative is to involve clients in the selection and design of their own treatment. There is evidence that when people freely choose a course of action, they are more likely to persist in and succeed with it (Deci 1980; Miller 1985).

Developing a Culture-Specific Knowledge Base

Treatment outcome research may have some important limitations when findings come from a restricted range of clients. What works well in one setting may be ineffective or inappropriate in another. The more that the studied samples differ in important ways from the population to be served, the greater the caution warranted in importing treatment approaches without specific further testing. The only way to know for sure how well a treatment approach works in a new context is to test it carefully and systematically. The subjective impressions of providers and clients are notoriously inaccurate indicators of actual treatment outcomes.

Furthermore, culturally appropriate interventions may not have been tested precisely because they are specific to an understudied population. Sweat lodges, vision quests, and ceremonial sings are traditional paths to healing among some Native American groups, but are unlikely to have been widely practiced and tested in other cultures (Manson et al. 1987). Acupuncture and meditation are commonly practiced in some Eastern cultures, but are only beginning to find their way into Western clinical trials (e.g., Bullock et al. 1987; Murphy et al. 1986). Such "alternative" (from the perspective of a different culture) treatments deserve consideration in the design of treatment systems, but like all therapies and medications should be carefully tested before being used routinely or preferentially.

These factors point to the importance of committing a portion of the resources of any service delivery system to careful program evaluation. This is also a reasonable self-defensive practice amidst growing economic pressure that require, as a condition for continued funding, demonstration that resources are being used fruitfully and wisely. Beyond such important pragmatic benefits, however, routine self-evaluation (for systems as for individuals) provides valuable feedback to be used in development. No learning occurs without knowledge of results. Reliable feedback helps a system keep growing and improving its services. In the absence of

current research, a treatment program has to start *somewhere*, but without self-evaluation the program and the field are no better off 10 years later.

A common response is to acknowledge the value of program evaluation but to say, "That's just not our mission. Our mission is to provide services." But is it really? Does a program truly exist for the ultimate goal of *providing services*? In fact, the ultimate goal is usually to bring about some beneficial change, and the provision of services is toward that end. Funding sources are increasingly concerned with evidence that intended outcomes are being achieved, and the mere assurance that services have been provided is insufficient. To know whether a program is producing desired changes (or to discover how to do so more effectively) requires careful evaluation. Until such information is gathered by treatment systems serving specific populations, we remain ignorant of the cross-cultural effectiveness and generalizability of different approaches.

A truly effective treatment system therefore needs a built-in method for self-evaluation, by which services can be improved. In simplest form, this involves collecting reliable information about those things (e.g., drinking behavior) that the program is intended to change. A first step in that direction is to *provide a consistent pretreatment evaluation of each and every client to be served*. This need not be complex or terribly time-consuming, although there are certain benefits to a comprehensive assessment. It can and should be built into routine services. The point here is to collect the same reliable information about each person's status before services are delivered. Such information can, in turn, be useful in treatment planning, and in motivating clients for change (Miller, Westerberg, and Waldron 1995). The addition of systematic followup evaluations can then document changes related to services (Miller 1988).

Reflections on Serving Rural Populations

Our preparation for and experience at the Alaska conference caused us to step back and reflect upon implicit assumptions that have guided treatment delivery. Within the context of Western service delivery systems, there has developed a set of assumptions that could be termed a *therapy ethos*. These might be stated as follows:

- 1. People ("patients") who come for treatment are unable to resolve their problems on their own, and require professional help.
- 2. This involves a process of therapy whereby an expert (therapist) uses special knowledge, insights, and/or techniques to change the recipient of these services. Healing comes from the therapist to the patient.
- 3. The patient's role is to receive the therapist's expert help and to comply with the prescribed treatment. This often requires that the therapist confront and overcome a client's resistance.
- 4. The course of treatment would be expected to require a somewhat protracted period of time for therapy to take effect. The longer a patient gets to work with the therapist, and the more intensive the treatment, the greater the improvement.

Even within the Western scientific context of controlled clinical trials, the evidence seems to us to indicate that there is something fundamentally wrong with this psychotherapeutic way of

thinking about change. Most tobacco and alcohol problems are resolved without formal treatment (Sobell et al. 1991; Vaillant 1995). Among those who do come for treatment, the degree of beneficial change is not found (in controlled trials) to be substantially related to the length of their exposure to therapy or to its intensity. Exposure to certain (e.g., more confrontational) therapists, in fact, is associated with a decreased likelihood of improvement (McLellan et al. 1988; Miller et al. 1980). When people are told to wait for professional treatment (being placed on a waiting list), they don't get better. When they are given one or a few sessions of brief, empowering counseling, they often show rapid and enduring change that may be similar in magnitude to that observed (on average) from more extensive treatment (an observation not dissimilar from anecdotal reports from Alcoholics Anonymous). When therapists (and presumably others) expect a person to recover, it tends to happen (Leake and King 1977). Treatments very different in their content often yield similar overall outcomes.

The chances of getting better in treatment are powerfully affected by the therapist to whom, by luck of the draw, one is assigned. Clients' "resistance" or "denial" appears to be an interpersonal phenomenon strongly influenced by the therapist, and counseling styles that increase client resistance produce little change, whereas empathic styles that minimize resistance are associated with relatively rapid change. People who faithfully do *something* to recover (even something that should not "work," like taking placebo medication) show better improvement. When people exercise control over their own treatment (such as choosing their approach to change), they fare better. People sometimes show dramatic and sudden bursts of change, usually outside the context of therapy, that are associated with broad and enduring transformation (Miller and C'de Baca 1994). A letter or a phone call can make a substantial difference in the course of treatment (Miller 1985). What happens *after* treatment, such as the extent of employment and social support (Moos et al. 1990) or Alcoholics Anonymous involvement (Montgomery et al. 1995), may be more powerful determinants of outcome than the events of formal treatment.

What's going on here? The pieces don't fit together neatly into the *therapy ethos* picture that says: "People must have treatment in order to recover, and the more they get the better they do." There is much to support a view that people have within themselves powerful resources for change, which are engaged by a firm decision and commitment. Personal empowerment communications, rather than those that foster reliance on an expert helper, may set change in motion. The interpersonal resources of the individual's community can also play a key role in recovery.

We certainly do not advocate the replacement of comprehensive treatment systems with brief interventions. There is need for a range of options among which the individual can find an avenue toward change. Yet we do see reason for caution, a danger in blindly accepting the therapy ethos and constructing treatment systems that imply and foster dependence on experts. Change happened and people recovered from alcohol problems long before there were professional addiction experts or treatment systems, and both individuals and communities contain within them many resources for change.

The implications of this different way of thinking, and of recent research reviewed above, are particularly provocative as one considers how to serve rural and frontier populations without ready access to complex treatment delivery systems. Brief motivational interventions, which are

well-supported as triggering change in substance abuse, can be offered in various contexts accessible to rural populations: through one or two visits, or within the context of primary health care, or even by telephone (Sanchez-Craig et al. in press). Even mail contacts can have a beneficial effect on heavy drinkers (Agostinelli et al. 1995; Heather 1995). Thus, brief counseling, deliverable in a variety of forms, may suffice to trigger change in alcohol/drug use, particularly when it occurs before the development of severe dependence.

When further support is needed for change efforts, what directions arise from research to date? One approach applied with rural populations has been to transport affected individuals to a distal treatment center, where they remain for a period of days or weeks before returning home. This "remove, rehabilitate, and return" model (reminiscent of automobile repair) assumes that the problem resides within the individual, and can be corrected by a stay in a therapeutic milieu. Yet drinking or drug use and related problems occur in a sociocultural and community context that is likewise quite important in sustaining change (Moos et al. 1990). Although changes (e.g., learning new coping skills) may occur in a distal treatment environment, they must ultimately generalize to the person's home environment. "Outpatient" treatment within the person's community context appears to be at least as effective as removal to an institutional center, with the additional benefits of being more cost effective and less disruptive (Holder et al. 1991; Institute of Medicine 1990).

How, then, can therapeutic services be delivered to rural populations? The concept of a "visiting therapist" may be workable with isolated individuals, but the intimacy of social life in most rural settings can pose substantial obstacles to confidentiality. Service delivery by correspondence or telephone affords greater privacy and may be more effective than previously assumed. It is also feasible to integrate screening and intervention for substance abuse into routine health care (Cooney et al. 1995), employee services (Miller et al. 1994), or even pastoral care (Miller and Jackson 1995), which can substantially increase identification while retaining confidentiality and intervening through natural helpers. In this context, individuals can be involved in selecting their own strategies for change, and choosing any forms of additional support that may be helpful to them in achieving their goals (Miller and Rollnick 1991). Change can also be accomplished by working confidentially through concerned family members (Meyers et al. 1995; Meyers and Smith 1995). All of this still assumes to some extent a caregiver model, and other approaches for using natural community resources need to be explored.

Finally, as stated above in the more general context of programming for special populations, it makes sense to begin with approaches that have worked in other settings. Although there are a few methods developed and tested with rural populations (e.g., Azrin 1976; Meyers and Smith 1995), those treatment approaches that have been found to be particularly effective in other settings represent a promising starting point in thinking through strategies for rural services. Adaptations are likely to be needed when established methods are applied in new cultural contexts, but approaches with demonstrated efficacy still constitute a sound beginning. Likewise, characteristics of more effective helpers may well be similar across settings, and it is sensible to take advantage of this knowledge in planning new service systems. Nevertheless, it is prudent to include in any newly implemented system the means to evaluate outcomes, both in response to accountability demands and as feedback for improving services.

In sum, there are many resources for change within individuals and their communities, and this should be remembered in developing new systems designed to alleviate the suffering related to substance abuse. This perspective holds particular promise when stepping outside the context of urban treatment systems. Exactly how to understand and engage natural change resources in rural and frontier settings is a puzzle well worth solving. Perhaps treatment system experience and research in such settings will provide new pieces of the puzzle, contributing to a more general understanding of how natural change occurs, and how it can be facilitated.

References

Agostinelli, G.; Brown, J.M.; and Miller, W.R. Effects of normative feedback on consumption among heavy drinking college students. *Journal of Drug Education* 25:31-40, 1995.

American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV.* 4th ed. Washington, DC: American Psychiatric Association, 1994.

Arciniega, L.T.; Arroyo, J.A.; and Miller, W.R. Alcohol, drug use and consequences among Hispanics seeking treatment for alcohol problems. *Journal of Studies on Alcohol*, in press.

Azrin, N.H. Improvements in the community-reinforcement approach to alcoholism. Behaviour *Research and Therapy* 14:339-48, 1976.

Bennett, L.A.; Janca, A.; Grant, B.F.; and Sartorius, N. Boundaries between normal and pathological drinking: A cross-cultural comparison. *Alcohol Health and Research World* 17:190-195, 1993.

Bien, T.H.; Miller, W.R.; and Tonigan, J.S. Brief interventions for alcohol problems: A review. *Addiction* 88:315-336, 1993.

Bullock, M.L.; Umen, A.J.; Culliton, R.D.; and Olander, R.T. Acupuncture treatment of alcoholic recidivism: A pilot study. *Alcoholism: Clinical and Experimental Research* 11:292-295, 1987.

Carpenter, R.A.; Lyons, C.A.; and Miller, W.R. Peer-managed self-control program for prevention of alcohol abuse in American Indian high school students: A pilot evaluation study. *International Journal of the Addictions* 20:299-310, 1985.

Cooney, N.L.; Zweben, A.; and Fleming, M.F. Screening for alcohol problems and at-risk drinking in health-care settings. In: Hester, R.K., and Miller, W.R. eds. *Handbook of Alcoholism Treatment Approaches: Effective Alternatives*. 2d ed. Boston: Allyn & Bacon, 1995. pp. 45-60.

Dahlgren, L., and Willander, A. Are special treatment facilities for female alcoholics needed? A controlled 2-year follow-up study from a specialized female unit (EWA) versus a mixed male/female facility. *Alcoholism: Clinical and Experimental Research* 13:499-504, 1989.

Deci, E.L. Self-Determination. Lexington, MA: Lexington Books, 1980.

Erickson, H.L.; Wolfe, B.L.; Waldron, D.J.; and Miller, W.R. "What Services Are Being Offered by Whom? A Survey of Substance Abuse Programs in New Mexico." Unpublished manuscript, 1996.

Ferguson, F.N. A treatment program for Navaho alcoholics: Results after four years. *Quarterly Journal of Studies on Alcohol* 31:898-919, 1970.

Frederiksen, K.I. North of Market: Older women's alcohol outreach program. *The Gerontologist* 32:270-272, 1992.

Gordon, T., and Edwards, W.S. *Making Your Patient Your Partner*. Westport, CT: Greenwood Publishing, in press.

Graham, K.; Saunders, S.J.; Flower, M.C.; Timney, C.B.; White-Campbell, M.; and Pietropaolo, A.Z. *Addictions Treatment for Older Adults: Evaluation of an Innovative Client-centered Approach*. Binghamton, NY: Haworth Press, 1995.

Hansen, J., and Emrick, C.D. Whom are we calling "alcoholic?" *Bulletin of the Society of Psychologists in Addictive Behaviors* 2:164-178, 1983.

Harris, K.B., and Miller, W.R. Behavioral self-control training for problem drinkers: Components of efficacy. *Psychology of Addictive Behaviors* 4:82-90, 1990.

Heather, N. Brief intervention strategies. In: Hester, R.K., and Miller, W.R., eds. *Handbook of Alcoholism Treatment Approaches: Effective Alternatives*. 2d ed. Boston: Allyn & Bacon, 1995. pp. 105-122.

Heather, N., and Robertson, I. Controlled Drinking. London: Methuen, 1983.

Helzer, J.E., and Canino, G.J., eds. *Alcoholism in North America, Europe, and Asia*. New York: Oxford Press, 1992.

Hester, R.K., and Miller, W.R., eds. *Handbook of Alcoholism Treatment: Effective Alternatives*. 2d ed. Boston: Allyn & Bacon, 1995.

Holder, H.; Longabaugh, R.; Miller, W.R.; and Rubonis, A.V. The cost effectiveness of treatment for alcoholism: A first approximation. *Journal of Studies on Alcohol* 52:517-540, 1991.

Huss, M. *Alkoholismus chronicus. Chronisk alkojolisjukdom: Ett bidrag till dyskrasiarnas känndom.* [Chronic alcoholism. Chronic alcohol sickness: A contribution to diagnosis.] Stockholm: Bonnier/Norstedt, 1849.

Institute of Medicine, National Academy of Sciences. *Broadening the Base of Treatment for Alcohol Problems*. Washington, D.C.: National Academy Press, 1990.

James, J.E. Symptoms of alcoholism in women: A preliminary survey of AA members. *Journal of Studies on Alcohol* 19:1564-1569, 1975.

Jellinek, E.M. Phases of alcohol addiction. *Quarterly Journal of Studies on Alcohol* 13:673-684, 1952.

Kadden, R.M.; Cooney, N.L.; Getter, H.; and Litt, M.D. Matching alcoholics to coping skills or interactional therapist: Posttreatment results. *Journal of Consulting and Clinical Psychology* 57:698-704, 1989.

Kahn, M., and Fua, C. Counselor training as a treatment for alcoholism: The helper principle in action. *International Journal of Social Psychiatry* 38:208-214, 1992.

Kua, E.H.; Ko, S.M.; Tian, C.S.; Yeo, B.; Halstead, S.; and Mahendran, R. A follow-up study of Asian problem drinkers. *British Journal of Addiction* 85:1261-1264, 1990.

Leake, G.J., and King, A.S. Effect of counselor expectations on alcoholic recovery. *Alcohol Health and Research World* 1:16-22, 1977.

Legge, C., and Sherlock, L. Perception of alcohol use and misuse in three ethnic communities: Implications for prevention programming. *International Journal of the Addictions* 25:629-653, 1991.

Manson, S.M.; Walker, R.D.; and Kivlahan, D.R. Psychiatric assessment and treatment of American Indians and Alaska Natives. *Hospital and Community Psychiatry* 38:165-173, 1987.

Mattson, M.E.; Allen, J.P.; Longabaugh, R.; Nickless, C.J.; Connors, G.J.; and Kadden, R.M. Chronological review of empirical studies matching alcoholic clients to treatment. *Journal of Studies on Alcohol* Supplement No. 12:16-29, 1994.

Maula, J.; Lindblad, M.; and Tigerstedt, C., eds. *Alcohol in Developing Countries*. Helsinki: Nordic Council for Alcohol and Drug Research, 1990.

McLellan, A.T.; Woody, G.E.; Luborsky, L.; and Goehl, L. Is the counselor an "active ingredient" in substance abuse rehabilitation? An examination of treatment success among four counselors. *Journal of Nervous and Mental Disease* 16:423-430, 1988.

Meyers, R.J.; Dominguez, T.; and Smith, J.E. Community reinforcement training with concerned others. In: Hasselt, V.B., and Hersen, M. eds. *Sourcebook of Psychological Treatment Manuals for Adults*. New York: Plenum Press, 1995.

Meyers, R.J., and Smith, J.E. *Clinical Guide to Alcohol Treatment: The Community Reinforcement Approach*. New York: Guilford Press, 1995.

Milam, J.R., and Ketcham, K. *Under the Influence: A Guide to the Myths and Realities of Alcoholism.* New York: Bantam Books, 1981.

Miller, N.S., and Verinis, J.S. Treatment outcome for impoverished alcoholics in an abstinence-based program. *International Journal of the Addictions* 30:753-763, 1995.

Miller, W.R. Motivation for treatment: A review with special emphasis on alcoholism. *Psychological Bulletin* 98:84-107, 1985.

Miller, W.R. Follow-up: Purposes, practicalities, and pitfalls. *Drugs and Society* 2:93-107, 1988.

Miller, W.R. Alcoholism: Toward a better disease model. *Psychology of Addictive Behaviors* 7:129-136, 1993.

Miller, W.R., and Baca, L.M. Two-year follow-up of bibliotherapy and therapist-directed controlled drinking training for problem drinkers. *Behavior Therapy* 14:441-448, 1983.

Miller, W.R.; Benefield, R.G.; and Tonigan, J.S. Enhancing motivation for change in problem drinking: A controlled comparison of two therapist styles. *Journal of Consulting and Clinical Psychology* 61:455-461, 1993.

Miller, W.R.; Brown, J.M.; Simpson, T.L.; Handmaker, N.S.; Bien, T.H.; Luckie, L.F.; Montgomery, H.A.; Hester, R.K.; and Tonigan, J.S. What works? A methodological analysis of the alcohol treatment outcome literature. In: Hester, R.K., and Miller, W.R., eds. *Handbook of Alcoholism Treatment Approaches: Effective Alternatives*. 2d ed. Boston, MA: Allyn & Bacon, 1995. pp. 12-44.

Miller, W.R., and C'de Baca, J. Quantum change: Toward a psychology of transformation. In: Heatherton, T., and Weinberger, J. eds. *Can Personality Change?* Washington, DC: American Psychological Association, 1994. pp. 253-280.

Miller, W.R., and Hester, R.K. Inpatient alcoholism treatment: Who benefits? *American Psychologist* 41:794-805, 1986.

Miller, W.R., and Jackson, K.A. *Practical Psychology for Pastors: Toward More Effective Counseling.* 2d ed. Englewood Cliffs, NJ: Prentice-Hall, 1995.

Miller, W.R.; Jackson, K.A.; and Karr, K.W. Alcohol problems: There's a lot you can do in two or three sessions. *EAP Digest* 14:18-21, 35-36, 1994.

Miller, W.R., and Rollnick, S. *Motivational Interviewing: Preparing People to Change Addictive Behavior*. New York: Guilford Press, 1991.

Miller, W.R., and Sanchez, V.C. Motivating young adults for treatment and lifestyle change. In: Howard, G., ed. *Issues in Alcohol Use and Misuse by Young Adults*. Notre Dame, IN: University of Notre Dame Press, 1994. pp. 55-82.

Miller, W.R.; Taylor, C.A.; and West, J.C. Focused versus broad spectrum behavior therapy for problem drinkers. *Journal of Consulting and Clinical Psychology* 48:590-601, 1980.

Miller, W.R.; Westerberg, V.S.; and Waldron, H.B. Evaluating alcohol problems. In: Hester, R.K., and Miller, W.R., eds. *Handbook of Alcoholism Treatment Approaches: Effective Alternatives*. 2d ed. Boston, MA: Allyn & Bacon, 1995. pp. 61-88.

Montgomery, H.A.; Miller, W.R.; and Tonigan, J.S. Does Alcoholics Anonymous involvement predict treatment outcome? *Journal of Substance Abuse Treatment* 12:241-246, 1995.

Moos, R.H.; Finney, J.W.; and Cronkite, R.C. *Alcoholism Treatment: Context, Process, and Outcome*. New York: Oxford University Press, 1990.

Murphy, T.J.; Pagano, R.R.; and Marlatt, G.A. Lifestyle modification with heavy alcohol drinkers: Effects of aerobic exercise and meditation. *Addictive Behaviors* 11:175-186, 1986.

Najavits, L.M., and Weiss, R.D. Variations in therapist effectiveness in the treatment of patients with substance use disorders: An empirical review. *Addiction* 89:679-688, 1994.

Park, P., and Whitehead, P.D. Developmental sequence and dimensions of alcoholism. *Quarterly Journal of Studies on Alcohol* 34:887-904, 1973.

Patterson, G.R., and Forgatch, M.S. Therapist behavior as a determinant for client noncompliance: A paradox for the behavior modifier. *Journal of Consulting and Clinical Psychology* 53:846-851, 1985.

Piazza, N.J.; Peterson, J.S.; Yates, J.W.; and Sundgren, A.S. Progression of symptoms in women alcoholics: Comparison of Jellinek's model with two groups. *Psychological Reports* 59:367-370, 1986.

Sanchez-Craig, M.; Davila, R.; and Cooper, R. Promoting self-help among problem drinkers: Reaching underserved communities, in press.

Sanchez-Craig, M.; Spivak, K.; and Davila, R. Superior outcomes of females over males after brief treatment for the reduction of heavy drinking: Replication and report of therapist effects. *British Journal of Addiction* 86:867-876, 1991.

Shore, J.H., and von Fumetti, B. Three alcohol programs for American Indians. *American Journal of Psychiatry* 128:1450-1454, 1972.

Sigelman, C.; Didjurgis, T.; Marshall, B.; Vargas, F.; and Stewart, A. Views of problem drinking among Native American, Hispanic, and Anglo children. *Child Psychiatry and Human Development* 22:265-276, 1992.

Single, E.; Morgan, P.; and de Lint, J., eds. *Alcohol, Society, and the State: The Social History of Control Policy in Seven Countries.* Toronto, Ontario: Addiction Research Foundation, 1981.

Sobell, L.C.; Sobell, M.B.; and Toneatto, T. Recovery from alcohol problems without treatment. In: Heather, N.; Miller, W.R.; and Greeley, J., eds. *Self-Control and the Addictive Behaviors*. Sydney: Maxwell Macmillan Publishing Australia, 1991. pp. 198-242.

Szapocznik, J.; Kurtines, W.M.; Foote, F.; Perez-Vidal, A.; and Hervis, O. Conjoint versus one-person family therapy: Further evidence for the effectiveness of conducting family therapy through one person with drug-abusing adolescents. *Journal of Consulting and Clinical Psychology* 54:395-397, 1986.

Vaillant, G.E. *The Natural History of Alcoholism Revisited*. Cambridge, MA: Harvard University Press, 1995.

Valle, S.K. Interpersonal functioning of alcoholism counselors and treatment outcome. *Journal of Studies on Alcohol* 42:783-790, 1981.

Wiggins, J.S. Personality and Prediction. Reading, MA: Addison-Wesley, 1973.

Willoughby, K.V. "Progression of Alcohol-Related Behaviors in a Navajo Sample." Paper presented at the National Institute on Alcohol Abuse and Alcoholism conference, "Addressing Alcohol-related Problems in Alaska," Anchorage, Alaska, 1995.

Wilson, L.G., and Shore, J.H. Evaluation of a regional Indian alcohol program. *American Journal of Psychiatry* 132:255-258, 1975.

World Health Organization, Expert Committee on Mental Health, Alcoholism Subcommittee. Second Report. WHO Technical Report Series, No. 48. Geneva: World Health Organization, 1952.

A Practical Approach to Opiate Addiction in a Rural Setting

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Abstract

This paper describes a methadone maintenance clinic in a rural setting in Iowa that operates within a private family practice. To investigate what attracts and keeps patients on the methadone maintenance program and to generate ideas to improve services, the clinic distributed a questionnaire to patients on the methadone maintenance program. Of 110 patients participating in the program, 87 patients responded to the questionnaire in January 1996. The questionnaire format combined quantitative and qualitative response options and asked for patient suggestions on how treatment could be improved. Factors that patients considered important were similar to those identified in the medical literature, including take-out doses of methadone for eligible patients, receiving a blocking dose of methadone, low cost of the program, staff attitude, and

convenient dosing hours. The difficulties and rewards associated with running the program are discussed.

Iowa typifies middle America. It is largely a rural State in the Midwest with a strong interest in agriculture and no major cities. Yet there exists a growing opiate problem in this State, with "China White"—white Asian heroin—coming from Chicago and infiltrating the eastern half of the state and "Mexican Tar"—black heroin originating in Mexico—coming from the south and west. Most metropolitan areas of greater than 100,000 people in Iowa have noticeable heroin problems. The other half of the problem is opiate addiction in the form of prescription medication found in Iowa wherever there are people, doctors, hospitals, and pharmacies. Many preparations can be and are injected intravenously, thus potentially contributing to the AIDS epidemic. HIV cases are gradually becoming more frequent; hepatitis B and syphilis are also significant problems in Iowa. Shoplifting and prostitution are common among opiate addicts in an attempt to support their habit. Prisons are being built in Iowa to deal with the ever increasing court convictions. As a direct correlation, the cost to the State is rapidly escalating.

Methadone maintenance is becoming more widely accepted as the treatment of choice for heroin addiction. Still, problems remain. Vincent Dole (1989, p. 1,681) asks, "With affirmative reports in the literature that show methadone maintenance to be both safe and effective, why do physicians persist in calling the treatment, "controversial" and thus ensuring that it will remain a subject of controversy? . . . Why is there no active outreach to persuade the homeless and criminal addicts—the most heavily infected and socially destructive persons—to enter treatment? Why do community leaders oppose an effective treatment of the addicts who are living in their own neighborhoods? Why has the medical profession surrendered control of the medical treatment to politicians and paraprofessionals?" His answer includes both prejudice and self-interest as being significant factors.

History of Our Program

Since 1984, as part of a family practice, we have been running our methadone maintenance program beginning with 1 patient to our current number of 110 patients, with no letup in new applicants. We have built onto our facility and added a social worker and another nurse, along with more clerical help. We are now fully computerized and recently began to offer LAAM (levo-alpha-acetylmethadol) and naltrexone (pure opiate antagonist). We attract patients from a very wide geographic area. Figure 1 is a map of the counties in Iowa and Illinois where patients are located.

Lyon Osceola Emmet Worth Dickynson Mitchell Howard Winnebag Winneshiek Allamake Kossuth Cerro Sioux Palo Floyd O'Brien Hancock Clay Gordo Chickasav Alto Fayette Clayton Bremer Buena ocahontas Humboldt Plymouth Wright Franklin Butler Cherokee Vista. Black Delaware Buchanan Dubuque Webster Hawk Grundy Woodbury lda. Calhoun Hardin Sac Jo Daviess Stephe Hamilton Jackson Tama. Linn Jones Benton Monona Boone Story Marshall Crawford Carroll Greene Carroll Clinton Audubon Cedar Shelby Dallas Jasper lowa Whiteside Harris Polk Scott Johnson Poweshiek Guthrie Muscatine Warren Madison Mahaska Keokuk Washington Cass Marion Rock Island Pottawattamie Henry Louisa Mercer Montgomery Mills Wapello Jefferson Monroe /Des Union Lucas Clarke Henry Adams Counties of Molines Warren Illinois Van Fremont Page Ringold Decatur Davis Taylor Wayne Buren Henderson Appanoose Counties with current patients Mc Donough Hancock Counties where patients have traveled from in the past

Figure 1. Counties in Iowa and Illinois where patients are located

Counties of lowa

Successes

Since we began treating opiate addiction in a family practice, patients who remained on our program for at least 1 month have had a retention rate of 88 percent. At present, 50 percent of our patients are gainfully employed, 10 percent are in school, 20 percent are disabled, and another 5 percent are in miscellaneous acceptable categories. Only 15 percent are in what we would call "an unacceptable state" and are in need of further rehabilitation. We always address mental health issues and make use of both major and minor tranquilizers, antidepressants, disulfiram, counseling, and referral for help when indicated. In many cases, we become the family physician and treat patients as much as possible like any medical patient where one of the problems is substance abuse. We address acute illness, and many people, for the first time ever, are now recipients of continuity of care for ongoing problems.

County health authorities annually provide HIV, hepatitis B, tuberculosis, and syphilis testing at our clinic. Thus far we have only had two patients on our program positive for HIV. We are the only facility in this area with experience in opiate addiction in newborns and therefore we take care of these babies born to mothers on methadone.

Social and family issues are important to us and are discussed at counseling sessions. Our staff works with lawyers, hospitals, penal institutions, courts, and parole/probation officers to facilitate patient rehabilitation. We have remained economically viable, charging \$180 per month to be on the methadone program. We have no Government funding but do collect from third party payers whenever applicable. James Cooper of the National Institute on Drug Abuse in talking about methadone and HIV (1989, p. 1,665) has spoken of "a brief window of opportunity in which to implement prevention efforts." Here in Black Hawk County, a metropolitan area with 120,000 people, we have heard no reference to heroin present in the community for the last 10 years, a sharp contrast to frequent reference to heroin in every other metropolitan area of greater than 100,000 people in Iowa.

Purpose and Methods

The key to our program's accomplishments is attracting and maintaining patients in treatment. Our own efforts are important, for example, in keeping up with the medical literature and attending conferences, such as the annual National Methadone Conference. We try to be innovative. For instance, when take-out methadone is "lost" or "spilled," we always ask if that patient knows of anyone who could benefit from our program. (It is possible that person has sold the methadone to another drug user who could benefit from our program.) More importantly, patients must feel that being on our methadone maintenance program is more acceptable than having a daily street opiate habit.

In this article we will explore the factors and characteristics of patient perception, especially those that relate to our rural location. We used an anonymous voluntary questionnaire, a portion of which used a Likert scale 1-5, to measure patient attitudes. Cooperation was excellent, as we received 87 questionnaires back over a 3-week period in January 1996.

Program

Demographics

The youngest patient is 19 years old and the oldest is 56 years, with a median age of 40 years. We now have 42 female patients and 66 male patients with 92 percent Caucasian, 12 percent African American, and 4 of other ethnic origins. Patients have used drugs for as short a period as 2 years and for as long as 36 years, with 62 of the patients having drug problems for greater than 15 years. Educational levels vary from having a college degree to only a ninth grade education. The average patient has a high school education. Slightly less than half of patients come from metropolitan areas of a population greater than 100,000; 30 percent came from towns of a population of 10,000 to 90,000 people, and 15 percent come from rural areas or towns with a population of under 10,000. (Approximately 6 percent did not note the size of their locale.) Length of time on the program for our patients is displayed in figure 2.

Figure 2. Length of time on the methadone program

1 month or less	1 to 6 months	6 months to <1 year	1 year to <4 years	4 years and above	No answer
4	12	17	26	4	7

Over half of the people reported they heard about the program on the street. Six mentioned they heard about the program from another doctor, and six heard about it from a drug counselor. Patients also mentioned they heard about the program from probation officers, family, friends, newspapers, and other patients who were on the program.

Logistics of Transportation

Patients must come to our clinic at least once a week. The logistics of transportation are an extremely important consideration for our patients; in fact, some people spend as long as 3 hours coming one way to our clinic. The average time being spent going one way is 1 hour. About half of the patients said they ride with others on the program; the other half come by themselves. We do stress to patients that reliable transportation is important and that self-reliance is an important part of rehabilitation.

Weather has kept 31 patients from the clinic at one time or another, and 29 patients have missed their appointments due to car trouble. These problems make life and rehabilitation much more difficult for patients living in rural areas. Of those surveyed, 28 patients had been stopped by the police or highway patrol on their way to and from our program at least once. In several instances, methadone was confiscated. These situations come up quite frequently and make our job much more difficult. We are responsible for every milligram of methadone dispensed in our clinic by Federal and State legislation.

Transportation costs are significant. Of patients surveyed, 26 noted costs of greater than \$15 per trip for transportation to our clinic. One must keep in mind the daily cost of an opiate habit for people entering our program in 1992 was \$120 per day.

Diversion

About half of the patients answered "yes" when asked if they knew of program methadone being bought or sold; however, only 19 patients stated that they had ever bought or sold methadone. The question of methadone being bought or sold illegally is important to us, to regulators, and to the public. While surveys indicate that methadone is clearly not a drug of choice, it is used if other opiates are not available. While patient rehabilitation is enhanced in many cases by giving take-outs, care must be given to minimize the illicit selling of this prescribed medication. We have attended numerous meetings on this very point with Federal and State regulators and the Iowa legislature to be able to address the problems of addiction in rural Iowa. Where distances traveled are so great and conditions can be very difficult, take-out medication is crucial for the success of our program for Iowans.

Counseling

The survey revealed that 80 percent of patients thought that they received enough counseling in our program. Only three thought that the counseling was too much and only 10 thought there was not enough counseling. We have had difficulty in establishing group counseling due to logistics. Only eight people expressed an interest in having group counseling. Generally our counseling is one-on-one with a social worker, a nurse, or a doctor. We try to be personable, practical, and positive with our patients.

Patients' Perceptions Of Staff

New patients are quite rapidly known personally by every member of the staff. We go out of our way to treat each patient as an individual. Of the 87 respondents, 85 percent rated the staff as being "very professional," 10 percent rated staff as "usually professional," and two patients chose "frequently unprofessional." Three patients called the staff "very knowledgeable" and 19 chose "knowledgeable," with 1 thinking that staff were "uninformed." Patients stated they feel that they are being treated as individuals. This was demonstrated by 75 people answering "very much so" when asked that question. Of people surveyed, 76 felt that clinic rules were about right, and 10 thought that rules were too strict.

We do try to be positive whenever possible, but we also make use of negative reinforcement. For example, a \$25 fee is charged for those patients coming to be dosed after hours; and also when the patient's frequency of trips to the clinic is increased according to government regulation; and when they are not complying with rules or doing as well as we expect that they should.

In our survey, we asked the open-ended question, "What is different about this program?" of the 48 patients who had been on another methadone program. Many of the patients' answers reflected that they felt that we treated people as humans, and that there is less cost, less hassle, and a much better staff. Words such as "respect," "understanding," and "caring" showed up frequently in the answers to our open-ended question. Several patients mentioned take-outs as being a big advantage of our program.

Key Factors

A part of the questionnaire listed all the factors that we thought might be important to patients. We also had several patients help us to make the list more inclusive. Patients were asked to rate each factor using the following scale: (1) Doesn't matter—none, (2) Minor—somewhat important, (3) Important, (4) Quite important, (5) Extremely important. We also recorded those questions that were not answered.

Results of the questionnaire are shown in table 1. Table 1 gives a weighted score for each item asked on the questionnaire, which reflects the relative importance of the individual items to patients. When patients were asked which factors were most important in keeping them in treatment, the most important factor, with a score of 4.6, was take-out doses of methadone for eligible patients. Take-outs are also shown to be important in the medical literature. The low cost of the program was also extremely important to our patients (a score of 4.4). Staff attitude,

convenient dosing hours, and receiving a blocking dose of methadone all received high scores (4.3).

Interestingly, when patients were asked an additional question, "Which factor is the most important in keeping you in treatment?" the top-ranked factor, determined by the one factor that they picked most frequently, with 26 responses, was receiving a blocking dose of methadone. Most patients are maintained at 60 to 100 mg of methadone. This correlates well with articles in the medical literature that show receiving an adequate dose of methadone is one of the most important considerations in being successful with methadone maintenance.

Other responses to this additional question were similar to those shown in table 1. The low cost of the program was in second place, with 18 responses, and in third place with 17 responses was take-outs. Staff attitude received 15 responses, and being treated in a medical practice versus being treated in a strictly methadone clinic received 13 responses. This has been mentioned in the literature as "the dignity of standard professional atmosphere" (Novick et al. 1988) and is seen as an advantage of treating methadone maintenance patients as part of a private family practice. Convenient dosing hours received 13 responses, and access to a physician received 12 responses. Every item was mentioned by the patients in response to the question. Many patients marked more than one answer as important to maintaining them in treatment.

Table 1. Patients' response to the question, "How important are the following factors in keeping you on the program?" (N=87)								
	ws	5	4	3	2	1	TR	Not answered
Take-outs when patient is eligible	4.6	60	8	10	2	0	80	7
Low cost of program	4.4	51	13	12	3	0	79	8
Staff attitude	4.3	45	16	17	2	1	81	6
Convenient dosing hours	4.3	41	19	13	2	1	76	11
Receiving a blocking dose of methadone	4.3	42	9	14	1	2	68	19
Access to physician	4.2	42	18	20	2	0	82	5
Access to nurse	4.1	38	14	23	1	1	77	10
Being treated in a medical proctice vs. being treated in a strictly	4.0	43	15	15	4	4	81	6

methadone clinic								
Prompt service (without a long wait)	4.0	38	13	20	7	1	79	8
Access to social worker	3.8	32	13	25	6	3	79	8
Low staff turnover	3.8	29	17	17	8	3	74	13
Program is private, not government funded	3.8	30	12	16	12	2	72	15
Counseling	3.4	26	10	20	12	7	75	12

WS= Weighted score; **5**= Extremely important; **4**= Quite important; **3**= Important; **2**= Somewhat important; **1**= Doesn't matter; **TR**= Total responses.

Note: Weighted scores were calcuted by multiplying the number of responses by 5 for responses in the "extremely important" category; by 4 for responses in the "quite important" category; by 3 for responses in the "important" category; by 2 for responses in the "minor—somewhat important" category; and by 0 for responses in the "doesn't matter" category. The sum of these scores was then divided by the number of responses to each factor, which resulted in the weighted score.

When asked for negative comments on the way our program works, no clear pattern came through. Distance traveled, inconvenient dosing hours, and cost did come up. A question on how the program could be improved prompted similar responses about distance, hours, and cost. One patient mentioned that the methadone program probably hurt the doctor's family practice and there is some validity in this.

A question on positive things that patients see in the program gave many a chance to express how grateful they were for the help they were receiving. Many superlatives were expressed about the staff and about being treated as an individual in a very personal fashion. People feel that we are genuinely interested in seeing them do well. Respect and improving self-esteem were mentioned frequently. The effort patients put into answering the questions was very gratifying to us as a staff. Finally, when asked if they would recommend the program to others in need, every person answered "yes."

Problems

We do still have major areas of concern in our program, not the least of which is in the area of public relations. We do not feel that we are understood by hospitals, jails, other treatment programs, police, community, or even by other physicians. Part of this is the fault of the press and the media. We must make a better effort at communicating with these various groups whenever possible. Although we try to do all we can to work with the various regulatory

agencies, many times we still feel more like adversaries to these groups than allies. This diverts a significant amount of our energy and effort, making it extremely more difficult to consider ideas such as opening up medication units in more diverse locations in Iowa. Another issue concerns patients threatened by managed care. At present we are not able to bill Medicaid or Medicare for our methadone maintenance treatment.

We constantly feel the stress of working with people whose lives are in crisis. As Newman stated in the *Annals of Internal Medicine*, "Physicians should not be obliged to treat heroin addicts. The care of such patients has been judged so difficult that workers at one prestigious medical center have called for their segregation into dedicated units" (1990). We agree that treatment is difficult, but feel that such impersonal and preferential treatment would be counterproductive.

Cocaine continues to be a huge problem in Iowa, as we are sure it is elsewhere. We know that with time on methadone maintenance treatment, the use of cocaine gradually diminishes. Other methods of addressing this problem are desperately needed. We would like to see a higher employment rate among our patients. We could contribute to society more by becoming more active in outreach to attract patients in need. We are also frequently frustrated by dealing with patients with dual diagnosis, especially personality disorders. It is very easy to get caught up in having low expectations for making these people's lives more meaningful.

Conclusion

The ready cooperation of patients was heartening. We are sharing a copy of this article with each patient. Our hope is that through the cooperative effort, we will put more meaning into their lives and create a stronger therapeutic milieu. We were pleased to see that many of the factors that patients considered important were similar to those identified in the medical literature. The study has shown us that diversion of methadone must continue to be an extremely important consideration. We feel that with the proper use of methadone, the negative impact of opiate addiction on individuals and society can be greatly diminished.

Recommendations

Our program has demonstrated considerable success in addressing opiate addiction in a rural setting. Some of what we have found could be applicable to other programs. Access to treatment remains a major barrier. The recent Institute of Medicine study suggests treating methadone just as any other schedule II substance (*Forum* 1995). If local physicians in private practice are one day able to provide methadone maintenance, then this article may identify ideas for effective strategies.

References

Cooper, J.R. Methadone treatment and acquired immunodeficiency syndrome. *Journal of the American Medical Association* 12:1664-1667, September 22/29, 1989.

Dole, V.P. Methadone treatment and the acquired immunodeficiency syndrome epidemic. *Journal of the American Medical Association* 12:1681-1682, September 22/29, 1989.

Methadone treatment regulation; New challenges for change. Forum 4(2):6-7, Spring 1995.

Newman, R.G. Advocacy for methadone treatment. *Annals of Internal Medicine* 113:819-820, 1990.

Novick, D.M.; Pascarelli, E.F.; Joseph, H.; Salsitz, E.A.; Richman, B.L.; Des Jarlais, D.C.; Anderson, M.; Dole, V.P.; and Nyswander, M.D. Methadone maintenance patients in general medical practice. *Journal of the American Medical Association*, 259(22):3,299-3,302, 1988.

Bringing Excellence To Substance Abuse Services in Rural And Frontier America Technical Assistance Publication (TAP) Series 20

Computers Link Adolescent Health Research to Rural Settings

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>Abstract

The generalizability of research findings to clinical areas has traditionally been a measure of research value. This age of technology has provided a tool to further expand the use of research to rural areas in a cost-effective manner. Computers are being used not only for data collection and analysis, but also for clinical purposes such as health screening. This presentation will discuss the use of computers in rural schools for health screening.

A University of Pittsburgh research team traveled distances of up to 2 hours to reach rural high schools to screen students for health problems. This screening process involved contact with 445 rural students who completed questionnaires during school. The 10 questionnaires provided information on drug use, self-esteem, coping, social support, depressive symptomatology, anger, optimism, and perceived physical health. Data entry, verification, and analysis were completed

using Teleform for Windows, version 4.0, which uses optical character recognition of data input via scanner, the Paradox Database Management Program, and SPSS (Statistical Package for the Social Sciences) for Windows, version 6.1, at the University. Within 2 days of testing, students at risk for depression or self-harm were interviewed by Advanced Practice Nurses, then evaluated and referred for treatment. Students who were at moderate risk due to poor coping skills were asked to participate in a 10-week cognitive-behavioral group. This prevention program, Teaching Kids to Cope (TKC), not only targets depressive symptomatology, but also improves the repertoire of coping skills that may be effective for combating problem drinking and/or other substance abuse.

The screening process used provided research-based identification of students at risk and direction for intensive professional intervention. The schools involved in this study are considering the integration of this screening process into the regular curriculum in the same manner as they now do vision and hearing screening.

In this climate of health care change, a major focus is prevention of illness, rather than one of healing after an illness has occurred. Adolescence is not usually thought of as a time fraught with major health concerns. However, the Office of Technology Assessment (1991) has examined recently available data which indicate that this may not be the case. According to this new information, many health problems, both physical and emotional, plague the adolescent population. Preventive health care for the adolescent has only recently been considered. It is of vital importance to evaluate students and target the "at risk" adolescent in order to offer suggestions for successful preventive intervention (Crockett and Petersen 1993).

Most of the recent studies concerning adolescent health have centered around urban teens, but youth in rural areas must also be carefully considered, researched, and evaluated. Preventive strategies must also appraise the social context.

One important developmental characteristic to take into account is the teen's current environment. Family and peer groups have a strong impact on the adolescent's environment. In rural areas, relationships may be more limited and thus exert a greater influence. This concentration of relationships occurs mainly because of the low population density and does have an impact on and make rural concerns unique.

Some rural adolescent issues are problems with access to care, often poverty with resultant inability to obtain health insurance, and a decrease in the availability of program funding (OTA 1990, 1991). Further research is needed to amend the already accumulated data on adolescent health issues.

Research should include plans for ease of identification and rapid intervention with rural teens who may be considered at a high level of risk. High-risk teens include those whose background would strongly indicate development of high-risk behaviors or actions. These behaviors may include, but are not limited to, promiscuity, violence, suicide attempts/completion, and substance abuse. Prevention is the key here, as it is easier to prevent the development of such behavior than it is to "heal" it.

Priorities for research, then, lie in the areas of health promotion with a strong focus on the high-risk populations of rural adolescents. Therefore, longitudinal assessment of adolescent health and the development of effective interventions to promote adolescent health and to enhance coping are public health priorities.

Purpose/Significance

The two goals of this longitudinal study are: (1) to measure mental and physical health in a sample of rural adolescents using computerized data entry and analysis, and (2) to test the effectiveness of a nurse-managed intervention designed to increase self-esteem, coping, and social support of students. Information obtained from the questionnaires used in the screening addressed adolescent substance use/abuse. If possible, correlations will be made, thus allowing for the development of improved preventive interventions.

A secondary objective of this study concerned the use of the Teleform data entry program. Use of this program allowed for rapid and accurate data entry. Our research team members were then able to return to the schools and assess any student who scored above 77 on the Reynolds Adolescent Depression Scale (RADS). These assessments were made within 2 days after testing. The combination of the depression score and the psychiatric assessment determined who was referred for followup care or eligible for participation in the randomized trial of the coping intervention.

The long-term significance of this study is the expectation to decrease the negative risk taking behaviors of adolescents and promote positive coping strategies. A conservative assessment of children's mental health (Pothier 1988) concluded that at least 12 percent of children, or 7.5 million children, were in need of some sort of mental health service. Nearly half of the children needing mental health service are deemed severely disordered or handicapped by their mental illness. The prevalence of child and adolescent mental illness may now range between 17 percent and 22 percent, or from 11 to 14 million children (NIMH 1990).

Teenage substance abusers have also increased in numbers, along with children who are at risk for mental illness because of environmental factors such as poverty, inadequate care, parental illness, death, and divorce. In addition to diagnosable mental disorders, statistics show that nearly 5,000 young people between the ages of 15 and 24 killed themselves in 1987 and that more than a million people in that age group make suicide attempts each year (CDC 1987).

Depressive symptoms, associated with or without suicidal ideation, may represent a potential life threatening crisis for the young person and indicate a need for prevention, evaluation, and intervention. According to the U.S. Department of Health and Human Services (1991), two of the major health objectives for the year 2000 are to decrease the adverse effects of stress by 18 percent and decrease the rate of suicides by 10 percent in the total population. Priorities for research, then, lie in areas of health promotion and disease prevention focusing on the high-risk populations of adolescents. One of the key areas to be explored is how to promote mental health, and to provide interventions for rural adolescents with depressive symptomatology by increasing social support and coping skills through education.

Specific Aims of the Study

The following are the specific aims of the study:

- 1. To describe the mental health of rural adolescents by identifying depressive symptomatology, perceived social support, coping strategies, drug use, self-esteem, anger, and optimism.
- 2. To describe the physical health of rural adolescents by identifying perceived physical functioning, bodily pain, vitality, general health, health needs and concerns, and illness-related absenteeism.
- 3. To examine the association of life events with mental and physical health as measured at baseline.
- 4. To evaluate the effect of the Teaching Kids to Cope (TKC) intervention on the mental health of rural adolescents.
- 5. To evaluate the effect of the Teaching Kids to Cope (TKC) intervention on the physical health of rural adolescents.

Program

The theoretical basis for this study is adolescent mental and physical health promotion. See figure 1. The 10-week Teaching Kids to Cope protocol is described briefly in table 1 and is described more fully in *The Adolescent Mental Health Program Manual*.

TKC Moderators Cognitive behavior techniques Effective coping skills Provision of social support Responses/Outcomes Stressors Mental health Negative life events Depressive symptomatology Perceived social support Coping strategies Drug use Self-esteem Anger Optimism Physical health Physical functioning Vitality Perceptions of general health Bodily pain Health needs/concerns Illness-related school absenteeism

Figure 2. Model of mental and physical health promotion

Session	Content	Group	Rationale/Literature Support	Activities
1.	Establishing group contact	Rules of group: trust and confidentiality	Clear rules and expectations enhance trust within the group (Yalom 1985)	Develop rules and contracts Review purpose of the group Ice breaker activity Mini-lecture on trust
2.	Implementing group contact	Knowing self, getting acquainted	Acceptance of similarities and differences in self and others will increase self-concept (Sank and Schaffer 1984)	Group go around Mini-lecture on self- image Handout/automatic thinking Homework: readings
3.	Beginning group cohesiveness	Coping, sharing lifestyles, evaluating stress level	Adolescence is a time of change Problem solving skills Increase self-concept and promote mental health	Group go around Teen stressors handout/discussion Mini-lecture on stress Review on automatic thoughts/assigned reading section Homework: buddy assignment and continue reading assignment
4.	Group cohesiveness/working phase	Coping; personak, peers, family, resources	Positive coping skills are strengthened as resources are utilized	Group go around Mini-lecture on coping Community resources handout Leisure time activities handout Homework: basic relaxation practice; contact buddy once during the week and complete leisure sheet
5.	Group cohesiveness/workign phase	Day-to-day coping Specific problems, cognitive and affective options	There are many challenging problems that have many solutions (Hank and Schaffer 1984; Beck 1976; Freeman and Greenwood 1987)	Grou go around Mini-lecture on coping Brainstorm: how people cope Relaxation tape review Leisure activities handout review Handout: problem- solving worksheet

				Scripted assertiveness exercise and homework assignment including problem-solving worksheet and relaxation techniques
6.	Working phase	The school as a problem- solving environment	The school environment influences the self-concept of the adolescent	Group go around Review coping skills; role playing, family/school Problem-solving worksheet Dispute handout Homework assignement including problem- solving worksheet and relaxation techniques
7.	Workign phase	The family as a problem-solving environment; move toward independence	The family can offer a strong base of support to adolescents	Group go around Family relationships Activity: do a family drawing Problem solving: parent/family problem Review community resources handout Handout on automatic thinking Practice relaxation Homework: relaxation practice and contact buddy
8.	Working phase	Peer relationships as problem-solving environment	Peers have major influence on happiness and lifestyle of the adolescent	Group go around Developing and amintaining healthy friendships Handout: exercise record Exercise on typical adolescent relationships Role play: assertiveness in peer relationships/peer pressure/decisionmaking Disputes handout Group termination reminder Homework:

				relaxation/life plans/contact buddy
9.	Termination	Assessment of group experience	Experience gained in a group will increase one's options in day-to-day situations (Yalom 1985) An exciting future is possible if one uses the uniqueness of self, problem-solving skills, and supportive relationships	Group go around Show and discuss movie: "Ride the Carousel" Activity: group mural relating to life plans Write and share a newspaper headline to summarize life activity in 10 years
10.	Group wrap-up	Contracting Evaluation	In the termination phase, it is useful to encourage the group memebers to identify their achievements in group and what they have gained from their experience	Prepare written contract for utilization of information gained Group go around: saying goodbye Group written evaluation Do post tests

Adapted from Puskar et al. 1990. Reprinted with permission, Nursecom, Inc.

Methods

In Phase 1 of the study, which lasted from 1995 to 1996, 445 high school students were surveyed to establish baseline data on the identified parameters related to mental health (depressive symptomatology, social support, coping, drug use, self-esteem, anger, and optimism) life events and physical health as well as to identify intervention and control groups (students who score 66 and above on the Reynolds Adolescent Depression Scale [RADS]). Students who scored in the high range (above 77) on the RADS, or who responded positively to critical items indicating possible suicidal ideation, were interviewed immediately by members of the research team in collaboration with Services to Adolescents at Risk (STAR) from Western Psychiatric Institute and Clinic, Pittsburgh, Pennsylvania. The students were referred for treatment if clinical depression or suicide risk was determined. Data from these subjects will be examined separately.

The research sample included freshman, sophomore, and junior high school students from three schools located in rural settings of southwestern Pennsylvania. Each one of these high schools serves a small rural community of approximately 7,000 people. Average family income of each of the three areas is approximately \$24,000. Minorities (5 percent African Americans) and both genders (50 percent male and 50 percent female) are represented. Dropout rates for the schools are 1.1 percent to 2 percent.

Inclusionary criteria included being enrolled in the regular, college preparatory, and honor classes; and ability to read and write English. Exclusionary criteria included being enrolled in a classroom designated for socially or emotionally disturbed children, and a loss through death of a parent or caregiver within 12 months prior to the study. It is believed that such a loss could increase depressive symptomatology and does not represent the usual high school student's life stress. Data from students identified by the school as learning disabled were deleted. Only two subjects were eliminated from the pilots based on being in learning disabled classes.

Students were asked to volunteer, and both their consent and that of their parents were obtained prior to testing or intervention. Mental and physical health and life events for all subjects were assessed at baseline. Based on the results of those surveys, the intervention was implemented and longitudinal assessment of intervention efficacy will be done in the future. For intervention/control groups, measures will be done at post intervention (T1), 6 months post intervention (T2), and 1 year post intervention (T3). Teacher ratings of intervention/control subjects' behavior will be done at baseline, T1, T2, and T3. At each assessment point, subjects' school records will be evaluated for grades, absences, and any discipline reports. The intervention group will receive the Teaching Kids to Cope intervention, a 10-week group protocol that has been shown to be effective in decreasing depressive symptoms and increasing coping skills in adolescents. A "booster" session for the groups will be given 9 months following the intervention. The booster should help to determine if such a session can enhance long-term effects of the intervention. This study builds on preliminary work evaluating access, retention, and efficacy of the intervention protocol. It further tests the protocol in promoting coping with a larger sample, evaluates the effect of a booster session, and assesses changes over time. In addition to self-reports, which are often not as reliable, student behavior will be evaluated by teacher reports and school records.

At-risk students can be identified quickly when computerized data entry systems such as Teleform are used. All data collection instruments used in the study were generated using Teleform for Windows, version 4.0 (Cardiff Software, San Marcos, California), which uses optical recognition of data input via scanner. The instruments used were adapted using the designer module of Teleform for Windows. The Teleform Designer uses text object and data entry fields. Several data entry fields are available, including choice, entry, constrained print, and image. Choice and entry fields allow the respondent to select a response by shading a bubble next to one of several listed options. Image fields are used to capture text data, which are generally of greater length. Text responses to open ended questions are captured using the constrained print or image fields.

As a rule, choice or entry fields were used whenever possible due to ease of use, high degree of accuracy, and the decreased need for visual verification. Constrained print fields were used whenever open ended questions requiring short responses (eight characters or less) were used. Constrained print fields are subject to greater interpretation by the computer and as a result were always visually inspected to ensure accuracy. Image fields were used when longer response, were needed (on the Child Behavior Checklist—Youth Version).

Finalized forms were then reproduced and distributed to subjects. Completed forms were scanned using the Teleform Reader and a Hewlett Packard Scanjet III. Once scanned, the images

of the questionnaires were evaluated and held for verification. Images were verified using the Teleform Verifier. This program displayed the image and moved through each questionnaire, allowing for visual verification of each constrained print field and image field, as well as any other type of field that was not answered. When the computer stopped, it required that the person entering the data look at the field on the computer screen and check the question against the actual questionnaire. Changes could be made according to the response of the student. Fields that were not interpreted correctly by the computer were corrected. This process was conducted by the Project Data Management Specialist and Director/Research Associate. Several computerized options are available when using Teleform to increase the accuracy and quality of the data. One such option employed was to make every field "entry required." This option caused the program to stop at every field/question that was left blank, regardless of its type.

The corrected questionnaires were then transferred by the Teleform Verifier to the Paradox Database Management Program. Scoring programs were generated using Paradox. Demographic characteristics and summarized scores were transferred to SPSS for Windows for appropriate statistical analyses.

The amount of data to be obtained from the survey is considerable. The optical character recognition program that we used provided rapid and accurate data entry and reduced turnaround time for interventions. In our study, the use of optical character recognition proved to be very effective, as the research team saw any student determined to be at risk in terms of their RADS score within 2 days. The only time this was not possible was if the questionnaires were administered on a Friday, in which case the students were seen on Monday. Students who were absent when they would ordinarily have been seen were seen as soon as possible after their return to school.

With this type of program, a data entry system similar to ours could be used by school or health professionals when surveying rural adolescent populations. The school personnel would administer the surveys and use a facsimile system to transfer the results to the computer in a university setting. Following analysis of these data, the rural clinicians could focus their interventions appropriately. This would result in maximum cost effectiveness and positive student outcomes. It would also, then, reduce the distance between university expertise and the at-risk rural adolescent.

Research Design

The research is being conducted in two phases, across three different class years within three different rural high schools. Phase 1 consisted of a survey to collect data on all 9th, 10th, and 11th grade students in each high school who were able to participate. The psychological battery used for the survey was comprised of 10 instruments: Reynolds Adolescent Depression Scale, Child Behavior Check List, Anger Expression Scale, Adolescent Health Inventory, Drug Use Screening Inventory, Life Orientation Test, Coping Responses Inventory Youth Form, Perceived Social Support Scale, Life Events Checklist, and the self-report for childhood anxiety related disorders (SCAReD). The physical health component involved use of the Adolescent Health Inventory. These survey data will provide information that can be used to describe adolescents in general (specific aim no. 1, no. 2) and examine the interrelationships among stressful events, and

outcome measures (specific aim no. 3) as well as serve as baseline data (specific aim no. 4, no. 5) for those eligible students who are later randomized to a treatment protocol.

Phase 2 of the study, which will extend from 1996 to 1997, will utilize an experimental, two-group design to examine the efficacy of Teaching Kids to Cope on optimism, self-esteem, perceived social support, variety of coping strategies used, anger, drug use, physical health, and depressive symptomatology for students who scored in the moderate to high range (66 and above) on the RADS. Based on the results of phase 1, subjects surveyed in phase 1 who meet the criterion of 66 or above on the RADS, are not at suicidal risk as determined by interview, and agree to participate, will be randomly assigned to either the control or intervention group. The 10-week psycho-educational TKC groups that meet during school hours are currently being conducted in the three schools. Each of the three schools has a control group and an intervention group, consisting of students from the 9th, 10th, and 11th grades.

Randomization to treatment protocol will be blocked, with blocks being based on the school (A, B, and C), class year (9th, 10th, and 11th), and gender (females and males), resulting in 332=18 school/class/gender randomization blocks. By randomizing to treatment within school/class/gender blocks, imbalances as to the number of subjects in each of the treatment groups across the combinations of school, class year, and gender are minimized. As to the sequencing of treatment assignment with the school/class blocks, treatment blocks of size 4 were used, resulting in six possible combinations of the two treatments across four positions in the treatment block.

The assessment measures will be the same as those used in the Phase I survey:

- Depression (RADS)
- Child behavior (Child Behavior Check List)
- Teacher report (Child Behavior Check List)
- Anger (Anger Expression Scale)
- Drug use (Drug Use Screening Inventory)
- Optimism (Life Orientation Test)
- Coping (Coping Responses Inventory—Youth Form)
- Social support (Perceived Social Support Scale)
- Life events (Life Events Check List)
- School records
- Physical health
- Anxiety (SCAReD)

Using these measures, randomized intervention subjects will be reevaluated immediately following the conclusion of the intervention (Time1), 6 months post intervention (Time2), and 1 year post intervention (Time3). Control subjects will also be reevaluated using the survey instruments at three points in time but at 10 weeks post randomization (Time1), 6 months post Time1 (Time2), and 1 year post Time1 (Time3). Teacher behavior ratings and school records (grades, absences, disciplinary reports) will also be assessed at baseline, T1, T2 and T3 for intervention and control subjects. A "booster" session will be given 9 months following the intervention to a random sample of half of the intervention group for each school/class block.

This will be done to see if a booster session can enhance long-term effects of the intervention. During the 45-minute booster session the group leader will review different coping methods and cognitive distortions and discuss how students have applied their knowledge about cognitive distortions through sharing of examples since the conclusion of TKC.

Barriers/Problems Encountered and Solutions

Difficulties were encountered when researchers left the University of Pittsburgh and entered the high school educational domain. Much effort was expended in compromise and good will to elicit the cooperation of school personnel.

Obtaining consent forms was problematic. It required frequent contact with the student populations and encouragement of the teachers to help in their return. The students were assured of confidentiality, and it is hoped that this will allow for truthful self-reports.

Processing the data continues to be a tedious procedure. All the forms must be viewed to ensure accuracy of scanning. It was extremely difficult to have the students print and shade correctly. However, University staff are currently revising and streamlining this process.

Current Status of the Study

The research team has screened 445 rural high school students with the psychological battery of 10 instruments. Of these students, 10.3 percent, or 46 students, had RADS above 77 and have received individual assessments.

Of the students interviewed, 43 percent were referred for treatment. It is unknown what percentage will follow through with treatment. The lack of available treatment resources as well as student reluctance to attend treatment is an ongoing issue in rural school settings.

The second intervention phase of the study is a 10-week psycho-educational group that meets during school hours. The groups are currently being conducted in the three schools. Following completion of the study, data will be analyzed and conclusions reached.

The early evidence suggests the need for mental health screening in the schools and also for coping skills to become an integrated aspect of the curriculum. It may be possible through the use of a data entry system for scoring and coping skills groups during school hours that adolescents may be saved years of anguish and emotional suffering.

References

Beck, A. Cognitive Therapy and the Emotional Disorders. New York: New American Library, 1976.

Centers for Disease Control. Youth suicide: United States 1970-1980. *Morbidity and Mortality Weekly Report* 36(6):87-89, 1987.

Crockett, L.J., and Petersen, A.C. Adolescent development: Health risks and opportunities for health promotion. In: Millstein, S.G.; Petersen, A.C.; and Nightingale, E.O., eds. *Promoting the Health of Adolescents: New Directions for the Twenty-first Century*. New York: Oxford University Press, 1993.

Freeman, A., and Greenwood, V., eds. *Cognitive Therapy: Applications in Psychiatric and Medical Settings*. New York: Plenum Press, 1987.

National Institute of Mental Health. *National Plan for Research on Child and Adolescent Mental Disorders*. DHHS Publication No. (ADM) 90-1683. Rockville, MD: National Institute of Mental Health, 1990.

Office of Technology Assessment, U.S. Congress. *Health Care in Rural America*. OTA-H-434. Washington, DC: U.S. Govt. Print. Off., 1990.

Office of Technology Assessment, U.S. Congress. *Adolescent Health. Volume III. Crosscutting Issues in the Delivery of Health and Related Services.* OTA-H-467. Washington DC: U.S. Govt. Print. Off., 1991.

Pothier, P.C. Child mental health problems and policy. *Archives of Psychiatric Nursing* 2(3):165-169, 1988.

Puskar, K.; Lamb, J.; and Martsoff, D. Role of the psychiatric nurse in an adolescent coping skills group. *Journal of Child and Adolescent Psychiatric Nursing* 3(2):47-51, 1990.

Sank, L., and Schaffer, C. A Therapist's Manual for Cognitive Behavior Therapy in Groups. New York: Plenum Press, 1984.

U.S. Department of Health and Human Services, Public Health Service. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. DHHS Pub. No. (PHS) 91-50213. Washington, DC: U.S. Govt. Print. Off., 1991.

Yalom, I. *The Theory and Practice of Group Psychotherapy*. 3d ed. New York: Basic Books, 1985.

Prevention and Intervention Substance Abuse Programs In the Ten Sleep, Wyoming, School

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Abstract

This paper examines the programs operating in the Ten Sleep School in Ten Sleep, Wyoming, to prevent the use of alcohol and other drugs. The school's health fairs and their contents are described. Also examined are the individual classroom programs at the elementary school, the positive affirmation wall program, seventh and eighth grade sociology/personal development class, after-school parent programs, and the Community Resource Room. Programs that network with other communities, especially the Youth Alternatives program in Worland, Wyoming, are described. The networked programs allow prevention and intervention for Ten Sleep School students and parents.

This paper provides information for school districts, communities, and individuals to develop prevention and intervention programs addressing alcohol and other drug issues. The information is also provided so that readers can vary the content material to meet their specific program development needs.

Ten Sleep School is located in the foothills of the Big Horn Mountains, in Washakie County, Wyoming. The population of Ten Sleep is about 300 people, and the school has about 160 students, K-12, all housed in one building. Students live in town and on rural ranches, with the farthest students being transported by bus to school about 40 miles one way. The closest city with services is Worland, Wyoming, approximately 26 miles away.

The Ten Sleep Division, which includes the town and surrounding area, has an overall area of 1,137 square miles. Based on 1990 census data, the Ten Sleep Division has a total of 695 people, indicating a population density of 1.6 people per square mile. The unemployment rate is at 5.4 percent, and per-capita income is around \$8,000.

The students in Ten Sleep experience some of the same problems related to drug and alcohol use as other students across the United States. The district surveyed samples of parents, students, and staff using questionnaires developed and researched by Pride, Inc. of Atlanta, Georgia. The results from the last Ten Sleep School drug and alcohol survey are listed in table 1. Data from table 1 indicate close agreement on "perception of use" between students, parents, and faculty. Overall results from table 1 reveal that the main substance currently being abused is alcohol.

	6-12 Graders	Parents' perceptions	•
Alcohol	30	28	35
Marijuana	1	9	9
Cocaine/crack	0	2	3
Uppers	0	3	4

Downers	0	2	5
Inhalants	9	6	4
Halucinogens	0	1	3

Table 2 indicates the perceived availability of drugs to Ten Sleep School students. Data reveal that a wide range of drugs are available to the students. This indicates a need to address the full spectrum of substance abuse in the preventive programs presented at the school. Even though the town is small, a wide variety of drugs are available.

Additional data were gathered from the American Drug and Alcohol Survey, Fort Collins, Colorado. Overall results from this survey indicate that about 15 percent of 6th to 10th graders are at moderate or high risk to use alcohol and drugs. Survey results also indicate that the majority of district students use drugs and alcohol away from school. This should be a concern for the entire community and has guided the content of many of the programs and of the health fairs. Additionally, data reveal that the use of cigarettes and smokeless tobacco is a concern, with more than 30 percent of the students above grade 6 having used cigarettes and smokeless tobacco at some time

Also, more than 6 percent of 6th graders and above use these products on a daily basis.

The remaining sections of the paper will examine the various programs at Ten Sleep School. Programs have been classified as prevention and intervention. Though the programs are varied in content and presentation format, the overall goal is to continue to reduce alcohol and other drug use. The school will continue its efforts to state a "No Use" message.

Methods

Prevention Programs

Ten Sleep School Health Fairs

The major prevention program is the school health fair. There are about four or five health fairs conducted throughout the year. Each health fair has between one-half to one full day devoted to various presentations. The health fair is open to all students, grades K-12, and to community members. Each health fair has a main theme, and the subject matter is broken down into two presentations. Presentations are given to grades K-6, and to grades 7-12. The subject matter is varied, but the overall theme is a "No Use" message to drugs, alcohol, and tobacco. The development of healthy lifestyles and methods to protect and take care of oneself and others are promoted.

The Drinking and Driving/Alcohol Awareness program centered on presenting the dangers of drinking and driving. This was accomplished by presenting morning sessions featuring a rollover

simulator/seat belt safety van. This presentation was provided by a networked effort between Ten Sleep School and the Wyoming Department of Transportation. A mannequin was used to show what happens when a person does not wear a seat belt in a truck rollover. Next, the main speaker from the Wyoming Highway Patrol spoke to student groups, grades K-6 in one session and grades 7-12 in another session. In addition to the presentations, grades 7-12 viewed the video, "The Aftermath," which showed the tragic effects of drinking and driving on a former Olympic diver who was convicted of killing teenagers in a drinking and driving accident.

A mock car crash scene was set up outside the school, which featured a car driven by a legally drunk driver that crashed into a phone pole. Three people were in the car. Working together to create this scene were the Washakie County Sheriff's Department, the Wyoming Highway Patrol, and the Ten Sleep Fire and Paramedic Departments. The scene displayed an actual car crash for grades K-6 but without the victims. The students had a chance to discuss the scene in individual classroom discussions. Grades 7-12 viewed the crash with victims. The scene, with victims, came alive with the moaning and screams that would be present in an actual crash. All emergency personnel responded as if it were an actual crash. Afterwards, the students were allowed to ask questions of emergency personnel.

The CPR/first aid certification program is conducted every November or December. It is offered to students in grades 7-12, and taught by local paramedics. Students receive training during the course of their regular school day. At the end of the day, all requirements for certification are completed and the students are tested. The average certification success rate is approximately 91 percent. Due to Ten Sleep's rural setting, the school is very proud to be able to certify students to provide initial intervention in emergencies, until the volunteer fire/paramedic departments can arrive.

A drug awareness program featured a previous drug user as the main speaker. This speaker was obtained through a networked effort between the Washakie County Probation Department and Ten Sleep School. This person was required to complete community service work through the Probation Department. Groups were broken down into grades K-6 and 7-12. It was a very real life presentation, which left the entire school audience aware of the consequences of substance abuse. Consequences presented were the physical changes due to addiction and also the legal aspects relating to loss of basic freedoms. After the presentation, the speaker visited individual classrooms to speak with students.

On a more humorous note, the school had a professional rodeo clown speak on substance abuse, and the need to stay in school, graduate, and pursue a college education. This program was a great success and was networked with the local student rodeo club. Students enjoyed the presentation, and in the evening a community presentation attracted close to 30 participants. The program was successful because the clown related very well to the audience and the culture associated with the Ten Sleep area.

A health fair on smoking/tobacco awareness included respiratory nurses from Washakie Memorial Hospital talking to grades K-6 and grades 7-12. The emphasis was on prevention and the effects of smoking and using smokeless tobacco. Pamphlets and displays were presented to the students. Students were allowed, after the presentation, to see the displays first-hand and ask

the nurses questions. Individual classroom discussions were held by classroom teachers. Grades 7-12 had the chance to view the video, "Death in the West," which highlighted health problems of men who had previously been in Marlboro cigarette commercials.

Several other activities have been conducted that augment information presented at the health fairs. In May of each year, the entire school, including staff, develops a chain of life. The chain of life consists of the names of everyone in the school, placed on 2 in. by 8 in. pieces of paper. The papers are made into one continuous chain, which is then displayed in the cafeteria. A banner is made and hung next to the chain saying, "Don't Break Our Chain of Life." This project attempts to address drinking and driving by presenting the idea that we are all one group and don't want to lose a life from a drinking and driving accident. In addition to making the chain, elementary students write letters and make greeting cards for high school students. These cards carry a strong anti-drinking and driving message. Elementary students then hand-deliver their cards and letters to high school students a few days before graduation and the end of the school year.

Positive Affirmation Wall

This is an ongoing program throughout the entire school. The program consists of posters, messages, and positive statements that are placed in hallways around the school building. These messages are designed to provide a continuous message to all students and faculty to remain positive, think of the consequences of their behavior, and find alternatives to the use of alcohol and other drugs. Visitors, both adults and students, are also exposed to these positive messages when they enter school to attend meetings and sporting events, etc.

Community Resource Room

The purpose of the community resource room is to allow students, parents, and community members access to information on alcohol and drug use topics. Also available is information on parenting, guidelines for teenage parties, developing positive self-concepts in children, fostering appropriate study habits in children, topics on abuse, and other topics helping people to confront issues they may have an interest in or are experiencing in their life. Placement of these materials in the public library nearby allows access by all community members. The materials are reviewed, replenished, and updated on a regular basis.

Sociology/Personal Development Class

This class was developed to meet the needs of seventh and eighth grade students. Its purpose was to present a curriculum to students that would allow them to develop a greater understanding of social issues. The main part of the class is based on the video series, "Power of Choice." The series has 12 parts and consists of topics including values, self-esteem, coping with pressures, and drugs and alcohol. Students watch the videos, answer questions, and participate in class discussions. Students also participate in a variety of other activities like skits, role playing, and creative writing assignments.

Classroom Programs

An integral part of prevention programs is the individual classroom presentations that are taught by the school psychologist/Drug Free School coordinator. Individual teachers contact the psychologist to present units of interest throughout the school year. Units presented include responsibility, making friends, cooperation, doing the right thing, and more. Emphasis this school year has been placed upon the development of study skills and organization in the elementary grades. All students in school, grades K-12, were provided with academic planners for this school year. This has allowed the students to organize their work to a greater degree, and to keep them focused on the academic tasks they need to complete. The school psychologist presents study skill improvement lessons to individual classes at teachers' requests. Also presented at teachers' requests are individual lessons on drug and alcohol education. Video series used in classroom presentations include the elementary "Power of Choice" series, and the "Your Choice". Our Chance" series.

After-School Parent Programs

Two after-school parent programs that have been presented help parents to discuss drug and alcohol issues with their children and also allow parents to develop techniques to improve parenting skills. The first program helps parents talk with their children about drugs and alcohol. It is adapted from the video series that is shown to upper elementary grade students, "Your Choice . . . Our Chance." Parents are shown the same videos that the children view and then develop strategies to work with their children. The other series is from Boys Town, and is titled, "Video for Parents Series." It consists of 12 videos and helps parents develop skills on a wide range of topics, from school to personal life.

Intervention Program

Minor in Possession Program (MIP)

The major intervention program is the Minor in Possession (MIP) Program. If a student is charged with possession of an illegal drug or alcohol outside the Worland city limits or in Ten Sleep, but inside Washakie County, the youth appears before the Justice of the Peace Court. If charged within Worland city limits, the youth appears in Municipal Court. The youth then must take a 10-session MIP program, each session about 1 hour in length.

The emphasis of the MIP program is on the dangers of substance abuse, building healthy communication with others, understanding personal strengths and weaknesses, getting a grip on pressures from peers and parents, practicing refusal skills, responding to current research on alcohol and its effects, and building a positive perspective of oneself. A parent or guardian must accompany the youth to the sessions.

Before a youth starts the program, both the parent/guardian and the youth undergo an intake session. Both parties must complete intake forms that investigate when a youth took his or her first drink, what responsibilities the youth has at home, communication between parents and their children, and other questions to investigate the current situation. The MIP program is operated under the Youth Alternative Program, and is taught by the Youth Officer.

Networked Agencies

The following agencies are networked in cooperation with programs that are presented to Ten Sleep students or are available to Ten Sleep students. These agencies have a direct role in the school health fairs that are presented during the year: Wyoming Department of Transportation, Wyoming Highway Patrol, Washakie County Probation Department, Washakie County Sheriff's Department, Washakie Memorial Hospital, Ten Sleep Fire and Paramedic Department, and the Three Rivers Student Rodeo Club. Their respective roles in the health fairs were previously discussed.

Human Resource Council

Monthly meetings during the school year are held by the Human Resource Council. The Council consists of the following agencies and personnel: Washakie Memorial Hospital Care Coordinator, Washakie Memorial Hospital Home Health, University of Wyoming Extension Office, County Library, Department of Agriculture, Youth Alternatives, Best Beginnings, Director of the Chamber of Commerce, Minister of the Seventh Day Adventist Church, Worland Schools Drug Free School Coordinator, Counselor at Worland High School, Washakie County Sheriff, Washakie County Community Health Coordinator, the Worland Senior Citizen's Center, and Ten Sleep School.

The Council meets to discuss problems that members have and to announce upcoming group programs. Problems are discussed in an open forum, and recommendations are developed by participants. Representatives of individual agencies involved in solving problems have the opportunity to meet after the meeting and to discuss their particular situations further. The Council has also developed a video library list that a member can use to locate and borrow a video. The list consists of all the videos that each member has in organization.

Youth Alternatives

The Youth Alternatives program is operated in Worland, Wyoming and is available to all youth and parents who reside in Washakie County. Services for youth include monitoring and meeting individually with youth who are participating in any of the youth alternative programs. The program is operated by a youth officer and an assistant youth officer.1 In addition to monitoring the programs, the officers also meet with appropriate school personnel, restructure study modes for grade deficient youth, and keep informed of negative youth activity through contact with the local Law Enforcement Center.

Finally, the Youth Alternatives Program operates two additional programs. These are the New StartùPrevention Alternative Program and the Diversion Program. Both of these programs try to help youth who are experiencing behavior problems and academic failure. The goals are to provide alternatives to improve behavior and academics.

The New Start Program is especially designed for elementary and middle school youth who have been placed on probation for a period of 6 months. These youth have been placed on probation

from either the Municipal Court or Justice of the Peace Court. The youth must attend 14 sessions. In addition, parents are required to attend the 1st, 7th, and 14th sessions with their child. Parents can also voluntarily attend parent support sessions, and they receive a certificate of attendance when they have accumulated a total of 10 hours' attendance. A mixture of videos and discussions is used during each 1-hour session.

The Diversion Program was developed as a need to supervise youth and grew from sessions that parents and high risk and/or adjudicated youth attended. A parent was concerned that she might have to file a CHINS (child in need of supervision) petition on her children. Out of this concern the Diversion Program was developed. This program allows individual children to meet separately with the youth officer or assistant one to two times per week. The parent of the child or children checks in two to three times per week to discuss positive and negative behaviors. The current consequences are also examined, and changes are made if needed.

Many of the youth who are potential participants for the program have experienced academic failure. Where families have failed to give appropriate or adequate support and youth have dropped out of school, the program offers GED study materials and then sets up times for testing. Some of the parents are also requesting GED study materials so that they, too, can pass the GED exam.

Finally, intake forms are completed by both the parent and the youth. These forms provide guidelines on family needs and provide information on the direction and duration of the program. The needs and duration are discussed at the first session. Upon completion of the program, outcome forms are written by the parent and youth. These provide a basis to examine the positive changes that have occurred.

Problems Encountered and Solutions

The main problem encountered in working with students, parents, and community members is their unwillingness to attend drug and alcohol programs offered at the school and other programs offered in Worland, Wyoming. Because this is a very small community, individuals do not want other people to know that they have problems. Just attending a program often leads others to assume that the person has a certain problem.

Another factor may be entering into people's decisions to not attend programs. In Wyoming, people hold their independence in very high regard. Even though problems are present, and a majority of people know who has these problems, being independent and not seeking help is the chosen action. People feel that they can solve their problems on their own and that they do not need any outside assistance. This appears to be the main reason that people tend to avoid going to the programs offered.

A final problem is cultural factors leading to alcohol and tobacco use. The image of the "cowboy" still prevails. Alcohol consumption and chewing tobacco are a way of life in this area. This leads to two distinct problems. First, alcohol consumption is not viewed as inappropriate by numerous adults and students. Cattle drives and branding time tend to naturally lead to alcohol consumption. The second problem is the enabling displayed by students and adults. If a student

becomes intoxicated or has a drinking problem, other students and adults will tend to dismiss the situation or problem as being minor. Other students also try to cover for the student who is drinking so that the student does not get into trouble.

Results are difficult to produce. Programs are available, but until cultural norms and behavioral expectations change in adults and students, alcohol consumption will continue to be a major problem in the area. It is important that all members in the community work together to reduce alcohol use in the community.

Conclusions

Overall, alcohol use is the major concern in the Ten Sleep area. Other drugs are available, but the predominant drug of choice continues to be alcohol. This may be due to numerous cultural factors that encourage the use of alcohol.

Prevention efforts have centered around the school health fairs. A variety of material is presented at each fair, and is available to grades K-12, and also to parents. Individual programs are presented at different grade levels, depending on each teacher's class needs. Ten Sleep School also networks with a number of different agencies to provide prevention and intervention programs.

It is very difficult to reach students and parents in the community, due to cultural beliefs surrounding the use of alcohol. Successful prevention techniques and help for students, parents, and families experiencing substance abuse will have to center on a total community effort. An attempt will be made to develop a community coalition involving churches, the Ten Sleep School, special groups, and individuals. The purpose of the coalition will be to address critical issues and find solutions for these problems. If a large majority of community members can be involved, there is a favorable chance that progress can be made to reduce substance abuse in the area, especially alcohol.

Identifying Predictors for Relapse at a Rural Medical Center

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Abstract

Based on observations in the medical record, 78 of 562 (13.9 percent) patients admitted to the inpatient unit of a rural Wisconsin medical center over a 4-year period suffered relapse within 1 year. Social, medical, psychological, and substance related variables were compared to the

probability of relapse within 1 year.

Patients who were married or living together or who had greater than 12 years of education were less likely to relapse. Students and patients who had no jobs, persons who had had a prior relapse, and persons with evidence for a personality disorder for hyperactivity were more likely to relapse. Persons who had had a prior relapse or evidence of hyperactivity were more likely to relapse. The RAATE (Recovery Attitude and Treatment Evaluator) predicted relapse based on the extent of active medical problems.

The medical record is a useful tool for determining whether relapse has occurred. Many of the social and psychological predictors in a rural area are similar to the predictors in other settings.

It is difficult in treating chronic medical illnesses to know how to measure clinical improvement. For example, in treating neoplastic diseases, one measure of success is 5 years survival. Another potential outcome measurement is time to relapse. In other chronic illnesses, such as diabetes mellitus, survival or the time from disease onset to the development of associated conditions is monitored. The treatment of addiction requires a similar orientation. Experienced clinicians as well as health planners are well aware of the propensity for persons with addiction to relapse. A reasonable measurement of success, therefore, is to consider the number of persons who remain free of the disease or effects of the disease over a monitored time period (Institute of Medicine 1990).

It is possible to do surveys of patients or clients or of persons acquainted with the patient in order to establish whether relapse has occurred (Desmond et al. 1995). Relapse, however, should often be apparent to clinicians involved in the patient's medical care. At the least, medically apparent relapse measures an outcome of relapse.

In analogous chronic diseases, preexisting medical, social, or environmental variables often help predict outcome. Often these variables are easily obtained and interact with treatment in determining outcome. In evaluating the science of addiction treatment, it is important to know how social, psychological, and physical variables predict relapse (Institute of Medicine 1990).

Addiction in rural America may be different from urban areas. The usage in rural American may differ from urban areas not only in observed rates of use but also by agents used in addiction. Moreover, the influence of predictors for relapse may be different in rural areas (Wertz et al. 1995).

Purpose

The purpose of this study is to look at predictors for relapse in a defined rural population. This study is meant to be exploratory. It looks at several potential predictors of relapse. These predictors are compared to the incidence of observed relapse. Such information is useful in evaluating the effectiveness of treatment. In addition, this information can be useful to clinicians in individualizing treatment to a patient's need.

Methods

The inpatient unit of the Marshfield Alcohol and Drug Treatment Program is part of the medical complex that includes the Marshfield Clinic and the adjacent St. Joseph's Hospital. The Marshfield Medical Complex is a rural referral center that potentially serves patients from central and northern Wisconsin. Persons who live near the Marshfield Center would need to travel a considerable distance in order to seek treatment elsewhere. Previous studies have demonstrated the utility of using this type of defined population in medical studies (Nordstrom et al. 1994). Followup is further facilitated by the use of a combined medical record.

A form was developed for data collection and presented to the Institutional Review Board (IRB) of the Marshfield Medical Research Foundation. With IRB approval and appropriate methods for maintaining anonymity, the treatment and medical records of all patients who were admitted to the inpatient unit during the years 1990 through 1993 were reviewed during 1995. The data abstracted included social variables, psychological and personality disorder diagnoses, medical treatment, and the most recent RAATE (Mee-Lee 1988) estimate of status. For patients who had more than a single treatment episode during that time, only information collected during the first episode was used for prediction. In addition, the clinic medical record and any hospital readmissions were reviewed for evidence of relapse in order to establish if and when relapse occurred. From that information, a variable was defined as "relapse within 1 year."

Information was maintained in a Statistical Program for the Social Sciences (SPSS) file, and analysis was done by simple frequencies and measures of differences in percentages. Although all admissions to the inpatient unit had data abstraction, this study is based only on patients who initially lived in the five county area around Marshfield.

Results

During the 4 years of observation, there were 562 admissions to the inpatient unit from the five county area. Of this group, 78 (13.9 percent) had evidence of relapse within 1 year. Overall, there were 392 (69.8 percent) males, but gender was not associated with the probability of relapse within 1 year.

The relationship of marital status to the probability of relapse is shown in table 1. For those who are married, 20 (9.0 percent) had relapsed. For single patients, 34 (18.9 percent) had relapsed within 1 year.

Table 1. Relationship of marital status to relapse within 1 year										
Relapse within 1 year										
Marital Status		No		Yes	Total					
Single	146	(81.1)	34	(18.9)	180	(100.0)				
Married or	203	(91.0)	20	(9.0)	223	(100.0)				

living together						
Other	135	(84.9)	24	(15.1)	159	(100.0)

The probability of relapse is related to the level of education (table 2). Those who had a high school education had a probability of relapse (13.8 percent) that was nearly identical to those who had less than a high school education (14.0 percent). However, for those who had greater than a high school education, the probability of relapse was 6.0 percent.

Table 2. Educational level by probability of relapse within 1 year Relapse within 1 year										
Level of Education		No		Yes	Total					
<12 years	117	(86.0)	19	(14.0)	136	(100.0)				
12 years	200	(86.2)	32	(13.8)	232	(100.0)				
>12 years	109	(94.0)	7	(6.0)	116	(100.0)				
Total	426	(88.0)	58	(12.0)	484	(100.0)				

Occupation was also related with the 1-year relapse rate (table 3). The highest relapse rate was for those who were students. The lowest relapse rate was for those who do odd jobs, followed by those who work in manufacturing and management.

Table 3. Re	Table 3. Relationship of occupation to relapse within 1 year											
Relapse within 1 year												
Occupation		No		Yes		Total						
Manufacturing	89	(92.7)	7	(7.3)	96	(100.0)						
Service	78	(83.0)	16	(17.0)	94	(100.0)						
Student	36	(75.0)	12	(25.0)	48	(100.0)						
Construction	37	(82.2)	8	(17.8)	45	(100.0)						
Odd jobs	37	(94.9)	2	(5.1)	39	(100.0)						
Management	28	(90.3)	3	(9.7)	31	(100.0)						
None	22	(75.9)	7	(24.1)	29	(100.0)						
Other	157	(87.2)	23	(12.8)	180	(100.0)						
Total	484	(86.1)	78	(13.9)	562	(100.0)						

Potential referral sources were compared with the probability of relapse (table 4). Only the referral sources of an AODA (alcohol and other drugs of abuse) counselor and a judge or lawyer recommendation were found to be related to the 1-year relapse rate. Seventy-four of the 77 patients who were referred by an AODA counselor (96.1 percent) had not relapsed within a year.

Table 4. Referral source by probability of relapse	
within 1 year	

Relapse within 1 year										
Care provider No Yes Total x ²										
Another hospital	20	(95.2)	1	(4.8)	21	(100.0)	1.942	.163		
AODA counselor	74	(96.1)	3	(3.9)	77	(100.0)	9.598	.002		
Physician	62	(86.1)	10	(13.9)	72	(100.0)	.000	.998		
Judge/Lawyer	35	(94.6)	2	(5.4)	37	(100.0)	2.952	.086		
Family intervention	77	(90.6)	8	(9.4)	85	(100.0)	1.822	.177		

The sources of care at the time of referral were compared with the 1-year relapse rate (table 5). The only care provider related to the probability of relapse was probation officer. The presence of other providers was not related to relapse rate.

Table 5. The relationship of care provider at the time of referral to probability of relapse Relapse within 1 year											
Care provider		No		Yes		Total	x^2	p			
Another hospital	28	(93.3)	2	(6.7)	30	(100.0)	1.586	.208			
AODA counselor	85	(87.6)	12	(12.4)	97	(100.0)	.186	.666			
Physician	135	(88.8)	17	(11.2)	152	(100.0)	1.179	.278			
Probation officer	55	(96.5)	2	(3.5)	57	(100.0)	7.410	.006			
Psychologist or psychiatrist	44	(80.0)	11	(20.0)	55	(100.0)	1.839	.175			

Nubmers in parentheses are percentages.

Note: Each patient was classified by whether or not that referral source was involved at the time of admission

The 1-year relapse rate is compared with social and psychological parameters (table 6). The strongest relationship was shown for patients who had had a prior admission for AOD treatment. In addition, the presence of a personality disorder, a drug conviction or the diagnosis of hyperactivity were related to the probability of relapse. Of the 58 patients who had prior admissions for AOD treatment, 19 (32.8 percent) had evidence of relapse within the year. Of the 26 patients with hyperactivity, 8 (30.8 percent) had also relapsed within a year.

Table 6. The relationship of social and psychological characteristics to relapse within 1 year										
	Re	lapse wit	thin	1 year						
Characteristics		No		Yes		Γotal	$ x^2 $	p		
Prior admission	39	(67.2)	19	(32.8)	58	(100.0)	15.417	<.001		
ADHD/Hyperactivity	18	(69.2)	8	(30.8)	26	(100.0)	5.308	.021		
Battery/Victim	134	(89.9)	15	(10.1)	149	(100.0)	2.424	.120		
Disorderly conduct	217	(89.3)	26	(10.7)	243	(100.0)	3.384	.066		
Driving while intoxicated	202	(86.0)	33	(14.0)	235	(100.0)	.034	.853		
Drug conviction	37	(97.4)	1	(2.6)	38	(100.0)	5.931	.015		
Personality disorder	178	(90.8)	18	(9.2)	196	(100.0)	5.548	.018		
Sexual abuse	85	(90.4)	9	(9.6)	94	(100.0)	1.777	.183		

The potential medical diagnosis or findings on admission were compared with the probability of relapse (table 7). The presence of intoxication at the time of admission was related to the probability of relapse, but the other four diagnoses were not. Of the 77 patients who were intoxicated at the time of admission, 17 (22.1 percent) had relapsed within a year.

Table 7. Medical problems noted on admission compared with probability of relapse											
Relapse within 1 year											
Medical problems	No		Yes		Total		x^2	p			
Hypertension	45	(84.9)	8	(15.1)	53	(100.0)	.090	.764			
Infection	43	(89.6)	5	(10.4)	48	(100.0)	.519	.471			
Thyroid disease	11	(91.7)	1	(8.3)	12	(100.0)	.342	.559			
Enlarged liver	104	(83.9)	20	(16.1)	124	(100.0)	.752	.386			
Intoxication	60	(77.9)	17	(22.1)	77	(100.0)	4.684	.030			

The substances found on toxicology screen (table 8) or as determined by dependency (table 9) were compared with the probability of relapse within 1 year. The presence of alcohol within the urine was noted to be related to the risk of relapse within 1 year.

Table 8. Admission urine screen by relapse within 1 year											
Relapse within 1 year											
Urine substance screen		No		Yes		Total	x^2	p			
Nicotine	335	(86.6	5) 5	2 (13.4	387	(100.0)	.025	.875			
Alcohol	119	(78.3	3) 3	3 (21.7) 152	(100.0)	10.920	.001			
Cannabinoids	68	(85.0)) 1	2 (15.0) 80	(100.0)	.155	.693			
Cocaine	24	(82.8	3)	5 (17.2) 29	(100.0)	.326	.548			
Amphetamines	2	(100.0))	0) (0) 2	(100.0)	.585	.444			
	F	Relapse w	ithin	1 year							
Type of dependency		No		Yes	,	Total	$ x^2 $	p			
Alcohol	412	(86.4)	65	(13.6)	477	(100.0)	.164	.685			
Marijuana	101	(87.8)	14	(12.2)	115	(100.0)	.361	.548			
Cocaine	56	(90.3)	6	(9.7)	62	(100.0)	1.120	.290			
Amphetamines	54	(96.4)	2	(3.6)	56	(100.0)	7.318	.007			

The diagnosis of amphetamine dependence predicted sobriety. Of the 152 patients who had alcohol in the urine on admission, 33 (21.7 percent) had relapsed within 1 year (see table 8). Of the 56 patients who were dependent on amphetamines, 2 (3.6 percent) had relapsed within 1 year (see table 9).

Table 9. Type of dependency by relapse within 1 year Relapse within 1 year								
Type of dependency		No		Yes	7	Γotal	x^2	p
Alcohol	412	(86.4)	65	(13.6)	477	(100.0)	.164	.685
Marijuana	101	(87.8)	14	(12.2)	115	(100.0)	.361	.548
Cocaine	56	(90.3)	6	(9.7)	62	(100.0)	1.120	.290
Amphetamines	54	(96.4)	2	(3.6)	56	(100.0)	7.318	.007

The five categories of RAATE were compared to relapse (table 10). The third component, medical conditions (acuity of biomedical problems), was related to relapse. The relationship to medical condition was ordinal so that those who had the better medical condition were less likely to relapse.

Table 10. Last RAATE estimate by relapse within 1 year				
	x^2	p		
Resistance to treatment	7.177	.127		
Acceptance of continuing care	4.633	.201		
Acuity of medical problems	10.264	.016		
Acuity of psychological problems	5.842	.211		
Extent of social problems	4.217	.239		

Note: Data are missing for 96 patients

Value					
Value of the 3rd Digit	N	Percentage	Total		
1	13	(7.8)	166		
2	26	(11.7)	222		
3	10	(16.4)	61		
4	6	(35.3)	17		
5	0				

Note: The total represents the number with that value. The *N* and percentage apply to the total who had that value at the time of the most recent RAATE. An increasing value indicates increasing problems.

Discussion

It is clear that certain social and psychological variables were related to the risk of relapse. Having a more stable marital stiuation or increased education reduced the probability of relapse. Similarly, certain occupations had less probability of relapse. It would appear that work adds an important structure that prevents relapse since those who had no work or students were most likely to relapse. The small number who had more than a single part-time job (odd jobs) actually had the best prognosis.

The referral source was also predictive. Those who were referred by an AODA counselor tended to have a better prognosis. The involvement of legal personnel (such as a judge or lawyer) tended to predict a better prognosis. Both of these variables may indicate a commitment to sobriety, from whatever source, that can be measured at the time of admission. In a similar fashion, the presence of someone under the care of a probation officer suggests preexisting structure.

This study also supports the concept that patients who have had prior admissions and relapses are more likely to relapse again. This is not significantly different from other chronic diseases. This study also suggests that certain concurrent medical and psychological diagnoses, such as hyperactivity or personality disorder, increase the probability of relapse. Although the number is small, drug conviction seems to indicate a better prognosis, but that is consistent with the fact that patients under the care of a probation officer or referred for legal reasons tended to show less relapse within a year.

Specific medical diagnoses, except for intoxication, did not predict relapse. On the other hand, those who were medically stable were less likely to relapse than those who still had ongoing medical problems. This phenomenon may be partly explained by the fact that the search for evidence of relapse used the medical record. Along with the fact that intoxication on admission portrays a poorer prognosis, alcohol in the urine was the only agent that also portrayed a poor prognosis.

In general, the type of dependency did not predict relapse. The only possible exception is the presence of amphetamine dependence. This, however, was the least common diagnosis. Furthermore, persons with amphetamine dependence may be less likely to seek medical care when they relapse.

Certain limitations should be noted. Central Wisconsin is a largely rural area and would seem to be consistent with many rural agricultural communities. However, the social, medical, and psychological parameters are likely to be somewhat specific to an area. Several variables were examined. It is possible, especially in a retrospective study, that spurious relationship may be found. Although there was checking of the data abstraction and data entry, it is important to remember that the data were obtained from clinical practice. When the information on diagnosis and RAATE was obtained, the participants were not aware that the data would be used for research purposes. Although this may introduce some imprecision in the collecting of the predictor variables, this study underscores the fact that routinely collected clinical data are predictive.

The presence in the medical record of evidence of relapse may understate the overall relapse. However, the presence of medical relapse is a functional marker of clinical importance. Although this very well may understate the overall relapse rate, it is not clear that this should necessarily be true for any specific predictor variable.

Implications

This study suggests that psychosocial predictors in a rural area are similar to those that have been found in other areas. It also suggests that information in the medical record can be reasonably combined with AOD information to facilitate care and overall planning.

From a research viewpoint, it is likely that some of the predictor variables are related. Further studies in a rural addiction center are indicated including, possibly, the use of multi-variable analysis. This preliminary information does suggest that patients can be stratified by risk of relapse.

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References

Desmond, D.P.; Maddux, J.F.; Johnson, T.H.; and Confer, B.A. Obtaining follow-up interviews for treatment evaluation. *Journal of Substance Abuse Treatment* 12(2):95-102, 1995.

Institute of Medicine. *Broadening the Base of Treatment for Alcohol Problems*. Washington, DC: National Academy Press, 1990.

Mee-Lee, D. An instrument for treatment progress and matching The Recovery Attitude and Treatment Evaluator (RAATE). *Journal of Substance Abuse Treatment* 5:183-186, 1988.

Moos, R.H.; Brennan, P.L.; and Mertens, J.R. Diagnostic subgroups and predictors of one-year re-admission among late-middle-aged and older substance abuse patients. *Journal of Studies in Alcohol* 55(2):173-183, 1994.

Nordstrom, D.L.; Remington, P.L.; and Layde, P.M. The utility of HMO data for the surveillance of chronic diseases. *American Journal of Public Health* 84(6):995-997, 1994.

Statistical Package for the Social Sciences (SPSS/PC+), Version 4.0.1.

Wertz, J.S.; Cleaveland, B.L.; and Stephen, R.S. Problems in the application of the Addiction Severity Index (ASI) and rural substance abuse services. *Journal of Substance Abuse* 7(2):175-188, 1995.

Project Wings! Inpatient Services for Mothers and Their Children

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Abstract

Project Wings, St. Mary's Regional Health Center, in the heart of the lake country in Minnesota, has been in operation since 1994. Project Wings serves chemically dependent pregnant women and women and their children in a primary chemical dependency treatment center. The women and children reside in the Wings house and receive a core chemical dependency treatment program through the Focus Unit. Programming is also offered at the Wings house when the women return home in the evening. The program provides parenting, sex abuse groups, family therapy, life skills, children's support and therapy groups, and education and career/employment counseling when appropriate. The usual length of treatment is 6 weeks. Three-quarters of the clients are American Indian, and the program is culturally sensitive to their needs. The program subscribes to the 12-Step model of recovery; the needs of the individual are considered paramount. Project Wings offers Minnesota's only program providing inpatient services to both women and their children.

St. Mary's Regional Health Center, a member of the Benedictine Health System, is a hospital located in the heart of the Lake Country in Detroit Lakes, Minnesota. In a rural community of approximately 7,000, this facility serves a tri-county area with a total population of approximately 30,000.

The Focus Unit has been a part of St. Mary's since 1987. This unit was developed in response to a community coalition whose mission was to provide treatment services to alcoholics and their families. Focus Unit provides inpatient, outpatient, and day treatment as well as education and intervention services at no cost to individuals.

In October 1994, St. Mary's Regional Health Center was awarded a grant through the State of Minnesota. This grant was for the purpose of opening a specific chemical dependency treatment program for women who are pregnant and/or mothers of minor children. This program continues to be the only Minnesota program providing inpatient services to both women and their children.

Purpose

The purpose of Project Wings is quite simple: We want women who are also mothers to experience the same quality of treatment available to others. This was not happening in our area, and in fact was not happening in any part of the State. Women who are mothers often do not have access to inpatient treatment settings, even when that is the level of care indicated—the children take priority in their lives. Our experience was that even when the mother could find appropriate care for her children, she was unable to focus completely on her recovery. All too often, the caretaker of those children continued to look to the mother for instruction and

emotional assistance. Frequently, the mother would receive a telephone call to come home for the daily crises that children of alcoholics are so adept at manufacturing.

It is our philosophy that men and women do have major differences in the ways in which they receive, interpret, and process input. When these differences are acknowledged, it is seen that different approaches are required in providing chemical dependency treatment to men and women.

In addition, children who grow up in an environment where one or more parent is addicted often become addicted themselves, both through genetic and environmental influences. It is our intent to minimize the detrimental effects of this, as we provide child care for mothers during treatment hours.

It is our mission to provide quality inpatient—and outpatient—chemical dependency treatment for families, to keep families together through prevention, education, and therapeutic interventions, and to allow mothers to get the help they need without needing to choose between themselves and their parenting needs. We subscribe to the 12-step model of recovery, believing that the needs of the individual are paramount.

Program Description

The methods we use for our program are not generic methods that can be used for each client. Rather, each client gets what we call client-specific strategies for achieving positive outcomes and increasing potential for recovery.

We work closely with our referral sources to get as clear a picture as possible of the family situation, the mother's motivation for treatment, and past history of chemical use. We require school records and immunization records for the children and past treatment history records for the mothers. If the mother is pregnant or has given birth within the past 7 days, we require medical records and a referral from her medical doctor to a local physician. In addition, we request that the referral source make every effort to locate funding for daycare; our funding sources for treatment do not include expenses incurred for children's services. Thus those services (for food and beds, etc.) are provided at no extra charge; daycare services are charged for through the referring counties.

Wings clients live with their children in a house located adjacent to the hospital. Each family has a room of its own; we have four bedrooms with space for a total of four mothers and up to nine children. The clients awaken each morning with their children, getting themselves and the children dressed and ready for the day. This includes 20 minutes of exercise for all residents, and time for house chores and preparing breakfast for their children. When they have completed these tasks, the mothers leave the children at Wings Daycare while they go to the Focus Unit for the "core" chemical dependency programming. They remain at the Focus Unit throughout the day, working with our chemical dependency counselors.

When the mother is finished with her day at Focus Unit, she returns to the Wings house. During the school year, this is also the time when she will walk to the local school (where all the

children at Wings are enrolled while they are here) to escort her child home. The mothers and children spend time in structured interactions and play activities between school and supper; supper is provided through the hospital food services. Family therapy, parenting, life skills, and play therapy are a part of the weekly schedule. Step parenting (Adlerian-based), assertive parenting, and process parenting are combined for a philosophical approach that our staff both models and teaches. We use a planned video/workbook program to teach basic life skills, as well as teaching budgeting, nutrition and menu planning, housekeeping, etc.

The methods that we use in working with these clients are commonly accepted in the chemical dependency field, education and group therapy being primary methods. We also include recreation therapy, art therapy, experiential writing, and play therapies. Relaxation, self-esteem, 10th Step, and day review, as well as *Big Book* study are an everyday part of the program schedule for all clients. In addition, a women's group and an abuse group are provided for women in the program. Our family component includes 1 day a week for those people who have close relationships with our clients. This may include parents, grandparents, a spouse, children, or a minister. The client makes the determination of who in their life would provide the most support for making necessary changes, and whom they wish to invite to this family program.

Our staff are able to see the changes in the family members and the positive impact to the family structure in the 6 weeks that the family is in our Wings program. Our "core" chemical dependency program is geared for those 6 weeks, with each week being a self-contained module. We have set up our program in this way in order to allow us to provide continuity of care. There are basics in education, lifestyle, and group therapy for clients who need only a short time for stabilization; at the same time, those clients who are here for the full 6 weeks are able to build on those basics in an inpatient setting.

Common therapeutic approaches include our rational emotive therapy group series on Saturdays. Adlerian, Gestalt, and other appropriate philosophical methods are utilized in all of our programs. During the time

in which clients are here, our program uses standardized methods of

providing recovery treatment. Those methods are built around:

- 1. Bio/psycho/social assessment and summary
- 2. A problem list
- 3. Treatment plan
- 4. Group therapy and therapy assignments
- 5. Education, including lectures and films
- 6. Discharge planning
- 7. Aftercare

The bio/psycho/social assessment is a three- to four-page document that contains a medical assessment done by the nurse (an R.N.), a psychological evaluation done by the consulting psychologist (who holds a Ph.D.), and a spiritual assessment done by our consulting clergy. In addition, this document contains the presenting problem or problems, family history, social history, legal history, education, and work history. A history of chemical use and treatments are

included. We also ask what the client's daily pattern of living, including recreational activities, has been prior to coming into treatment.

With this information, we develop a short-term treatment plan for the client's first several days. This includes attendance at Alcoholics Anonymous (AA), orientation to the Unit, and attendance at all treatment unit activities. A master problem list is also formulated. This document itemizes current issues in the client's life that may impede recovery. These issues may include items such as family relationships, being charged with driving under the influence (DUI), grief, and a lack of appropriate housing.

The master treatment plan addresses specific methods of working on those problems and includes dates and times the client is expected to complete each assignment. The client's case is presented to the multidisciplinary staff team weekly; history and current conditions as well as progress in the program are discussed. Input from the team is noted in the chart.

Clients are expected to work on barriers to recovery in our group therapy sessions. Methods utilized by staff are Gestalt, Adlerian, rational emotive therapy, experiential therapy, and play therapy. Self-disclosure is expected from each client; each client's comfort level and ability to follow through with this is respected and handled individually. There are several types of group therapies throughout the week; some focus on specific topics such as anger and study of the Steps.

Our education series consists of two lectures daily. The schedule is designed so that each client who is here for 5 days will be provided basic education in family, relapse prevention, spirituality, denial, and the disease concept, as well as in recreation and medical effects of substance abuse. It is our philosophy that a lack of education regarding the basics of addiction can be a leading factor in relapse.

Discharge planning for each client begins as soon as that client comes in. Wings clients often are admitted from referral sources with suggestions for discharge plans such as locating a halfway house that will take women with children, or attending an aftercare program in their location. Areas identified on the problem list that were not addressed or not completed on the treatment plan are also addressed. Discharge planning includes support for the children and for the woman in her role as mother. All women who reside within our area attend Aftercare at our facility, and the children continue to attend the Children's Group here as well on a weekly basis.

Aftercare at our facility includes one education session and one group therapy session per week. Additional sessions are available if indicated in the discharge plan. An example of this would be if the discharge plan included anger work, grief work, or domestic abuse issues. We would then assign the women to these groups, or make connections with local providers for psychological followup or domestic abuse followup.

Meeting Population Needs

Extensive research underpins the program. The research was done as part of the work required to obtain a State grant, showing the need for such a program. Additional research was done to

ensure that the program design and development would meet the needs of the targeted population. A basic approach to program design was provided through the Women's Alcoholism Program of CASPAR (Finkelstein 1993). This treatment guide for caregivers provided us with education for all staff and was the basis for several of our lectures and groups, including the medical effects of substance abuse on women, family work with the families of our Wings clients, and Women's Group topics. We also utilized the *Resource Manual: Model Treatment Program for Chemically Dependent Women* published by the State of Minnesota (Teel 1989). From this we based several of our treatment planning approaches on issues such as boundaries, victimization, sexuality, and mental health planning.

As our Wings population is approximately 75 percent Native American, our program needs to reflect cultural differences while enhancing pride in heritage for that population. We have incorporated as many of the recommendations as possible from the *American Indian Women's Chemical Health Project* (Hawkins et al. 1993). Examples of these are our emphasis on spirituality and chemically free recreational activities for the family. Each woman (and many of the children) make one dreamcatcher while they are here. In addition, a local American Indian Center hosts a women's AA group that all of the women attend and report great benefit from.

Our nursing staff provides women of childbearing years information regarding fetal alcohol syndrome (FAS) and fetal alcohol effects (FAE), and our local physicians work with those women who are pregnant or who have just given birth. We have had women with infants as young as 48 hours old, and women who were 8 months pregnant when they completed our program.

An outside speaker comes in weekly to discuss topics such as birth control, domestic abuse, and budgeting. This program enables us to provide extensive amounts of information utilizing local specialists in these areas, thus making maximum use of our resources while promoting community involvement.

Relationships With Others

Women who are involved in relationships with a significant other are encouraged to work on those relationships while admitted to our program. We believe that when these relationships exist, women will continue with these relationships; recovery needs to occur within that context. We can provide assertiveness, boundary, and self-esteem work, and can point out some trouble spots as well as options for resolution if we accept these clients where they are, rather than attempt to move them toward where we think they should be. We utilize a family assessment, with a treatment plan for the family. This assists our staff in providing a cohesive approach to working with this family whether they are on the Focus Unit floor or at the Wings house. We have had several occasions when supervised visits or restraining orders were required to preserve safety; this necessitated a unified approach from staff as well as assisting the woman while she worked through some boundary and self-esteem issues.

Our program continually changes and evolves; new information is added through workshops and staff professional and personal growth. Things that worked well with some groups do not work at all with others, and modifications are required. Through this process the Wings program has

become flexible in its ability to provide a great deal of individual attention, while maintaining a structure that provides clients a safe, nurturing environment in which to make fundamental changes.

Barriers/Problems Encountered and Solutions

One of the first problem areas we encountered after we received our grant funding was the overwhelming amount of red tape required for the licensure process. Since this program was the first of its kind in our State, it seemed that no one agency or person was able to provide us with clear and concise information on rules and regulations for licenses or even what licenses were required. Although a halfway house for women and children had opened up several years prior to our program, and those licenses had been obtained, many of the State employees who had assisted with that process were no longer with that department. We were finally licensed after 9 months and after a great many hours. Zoning was not a problem because the house was located in an area between the hospital and the nursing home and had been zoned commercial already.

Programming problems that emerged after opening centered around provision of care to the children while mothers were present, provision of care to children whose mothers came to our program intoxicated, and formulation of policies to deal with supervision of mothers who were providing care. The changes made to the program as a result of these problems have implications for other agencies. One policy we now have is that if children and mother have been separated through foster care, etc., reunification is an inappropriate and disruptive event for our program. Women need to have been the primary caregivers of the children prior to admission for at least 6 weeks. In addition, women who present for admission and are intoxicated must be admitted to the Focus Unit for detoxification. Local social services are involved to provide care for the children, as our licenses do not cover such contingencies.

Several of the staff members who have been in the chemical dependency treatment field for some time were skeptical about our program and took a "wait and see" attitude. This presented neither a barrier nor a problem; our Wings staff simply saw this as a challenge to prove the basic "rightness" of such a program.

Community response to our program has been overwhelmingly positive; we have received donations in the form of both items and dollars. Marketing has presented no problems. When referral sources heard of this program, they began to refer to it. We have sent out two newsletters and have received referrals from counties in all parts of the State, as well as from several other States. The program has met our census expectations as well.

Findings

Our findings are showing that the women who complete our program report a marked increase in the quality of life. While not all of the women completing the program maintain abstinence, they do improve their parenting skills, life skills, and their relationships with their children.

Children have tended to improve in the school setting and to exhibit more self-confidence when leaving our program. Because we do work with both the mother and the child, the long-term implications of a program such as this are enormous. We provide prevention techniques, problem solving, emotional resource building, and self-esteem to both mother and child. Additional research would need to be funded on a long-term basis in order to ascertain the impact on these future generations.

We have found that 6 weeks in the program is usually necessary for the women, as they are required to perform so much more than in a regular program. We have also found that having this 6 weeks is one of the components of our success.

Our program participates in the Minnesota Treatment Accountability Program, which is an evaluative vehicle. We are currently awaiting the first results of this program to provide us with correlative material as well as numerical numbers regarding client success after 6 months of completion of our Wings program.

Our Focus Unit is a 10-bed facility and Wings adds another 4 beds. Our previous census had been an average of 2.5 daily; currently it averages 7.5. For safety reasons, we were required to hire more staff due to the location of the new facility (Wings is staffed round the clock). Additionally, one program therapist position was required to ensure that program elements were provided at the Wings house. With the additional staff, we have been able to provide programming that is gender specific, age specific, and culturally specific, within a program whose numbers are very small.

Recommendations

It is our belief that this program is an example of how specific programming can be provided to special populations in rural America, utilizing the resources of a small treatment program to maximum benefit. Project Wings proves that women and children benefit greatly from keeping the family intact, through providing programming that recognizes the role of women within the context of their lives and that builds on their existing strengths while providing structure, modeling, nurturing, and a safe place to experience the first stages of recovery from chemical dependency. We recommend that programs such as ours be available for each chemically dependent woman who is pregnant and/or has children.

We recommend that agencies contemplating beginning such programs contact existing ones. This research is basic to making the decision to go ahead, as barriers do exist and are formidable, although certainly not prohibitive.

We also recommend that funding for such programs be made available. Currently, our funding is in jeopardy at the Federal level. While our program will struggle if no other changes to funding and current allocations to counties for chemically dependent populations changes, we will survive. However, we are currently unable to serve the large numbers of women who are in need of a program such as ours, are willing to make the changes, and are ready *now*. Our waiting list sometimes is over 8 weeks long.

We believe our program reflects the growing need to make maximum use of resources, especially in rural settings where programs are small and specific populations are generally not treated with population-specific programs. We also believe there needs to be a recognition from government agencies that such populations do exist, that programs need to address them, and that regulatory bodies should make efforts to assist these efforts.

References

In addition to the resources named here, Project Wings benefited from the expertise and experiences shared by Jessili Moen, Journey Home, St. Cloud, Minnesota, and Pamela Young, Grants Coordinator, Minnesota Department of Human Services.

Center for Substance Abuse Treatment. *Improving Treatment for Drug Exposed Infants*. Treatment Improvement Protocol (TIP) Series, No. 5. DHHS Pub. No. (SMA) 93-2011. Rockville, MD: Center for Substance Abuse Treatment, 1993.

Finkelstein, N.; Duncan, S.A.; Derman, L.; and Smeltz, J. *Getting Sober, Getting Well: A Treatment Guide for Caregivers.* The Women's Program of CASPAR, 1993.

Hawkins, N.; Day, S.; and Suagee, M. *American Indian Women's Chemical Health Project*. St. Paul: American Indian Section, Chemical Dependency Division, Department of Human Services, State of Minnesota, 1993.

McCollum, E.E.; Trepper, T.S.; Nelson, T.S.; Wetchler, J.L.; and Lewis, R.A. *Systemic Couples Therapy for Substance Abusing Women*. Purdue Research Foundation, 1993.

Teel, L., ed. *Resource Manual. Model Treatment Program for Chemically Dependent Women.* 2d ed. St. Paul: State of Minnesota, Department of Human Services Chemical Dependency Division, 1989.

A Community Outreach Project in A Rural School District in Pennsylvania

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Abstract

A comprehensive community approach has been underway for the past 5 years in Saxton, Pennsylvania (Bedford County), a small rural community of less than 2,500. Through prevention grants and funding from the Pennsylvania Drug-Free Schools Program, the Tussey Mountain School District reached a decision to combat substance abuse and related violence/ crime problems within the school district, as well as in this geographically isolated community in south

central Pennsylvania. Based on the findings of the 1989 Primary Prevention Awareness, Attitude, and Usage Scales Survey (PPAAUS), Bedford drug and alcohol county comparison reports, the local community council's recommendations, and followup 1994 PPAAUS survey results, the school district implemented a Community Outreach Project (CORP) establishing a comprehensive drug and alcohol policy and a Community Advisory Council, and hired a school-based drug and alcohol facilitator and coordinator for the program.

This paper describes the Tussey Mountain School District and Saxton community's comprehensive Drug and Alcohol Prevention/ Intervention Program. It identifies the six basic strands that work, discusses the research that prompted community action, and makes 21st century recommendations to the community and school.

The Tussey Mountain School District is concerned with the educational, emotional, and social growth of the individual student. The district works to educate about and prevent and intervene in the use and abuse of all drug, alcohol, and mood altering substances by the entire student population. It is the belief of the district that these students should receive the necessary help quickly, effectively, and professionally. As an extension of the policy, rules, regulations, and guidelines that are in place are used by all school district personnel when responding to drugs, mood altering substances, and alcohol-related situations.

The Community Outreach Program (CORP) attempts to coordinate alcohol and other drug (AOD) projects with local county agencies, colleges, rehabilitation centers, juvenile probation, and school personnel, as well as join families with social agencies for additional support and help. The school serves as a facilitator for all human service agencies in an effort to "join together" for the benefit of the student. We have developed partnerships, collaborations, and linkages with Bedford and Huntingdon County social agencies; Human Services (the Single County Authority); Mental Health (Base Service Unit); Employment and Training, Inc. (JTPA); children and youth services; health care agencies; the local ministry; community career centers; juvenile probation; and basic education institutions, such as Juniata College and The Pennsylvania State University Cooperative Extension Office.

Because the school is located in two adjacent counties, the program reaches out to both Bedford and Huntingdon Counties. The Tussey Mountain School District addresses substance abuse and violence problems by implementing the following successful six basic strands:

- 1. Assessing the problem and needs
- 2. Drug and Alcohol Community Advisory Council
- 3. Enforcement policies/alternative placement options
- 4. 21st century curriculum update
- 5. Intervention and Therapeutic Models
- 6. Law enforcement

Assessing the Problem

In 1989 and 1994, the Tussey Mountain School District administered the Primary Prevention Awareness, Attitude, and Usage Scales survey (PPAAUS) to students in grades 7-12. The

primary purpose in administrating the survey was for school officials to monitor the extent of tobacco, alcohol, and other drug usage among students in order to formulate policy and continue appropriate prevention and intervention programs.

Tussey Mountain School District received a summary of the results, as well as a comparison of 7th, 9th, and 12th grade students with other students across the Commonwealth. The results pertaining to drug and alcohol use indicated that alcohol as the number one drug choice for students at Tussey and throughout Pennsylvania. However, the actual reported monthly use and intent to use alcohol for seventh grade students at Tussey was lower than reported across the State. In ninth grade, actual usage at Tussey was nearly equal to the Commonwealth. Forty-one percent of the current seniors at Tussey reported using alcohol monthly, compared with 48 percent of 12th grade students in Pennsylvania. In comparison to the other four districts in Bedford County, Tussey reported the second highest monthly usage of alcohol for students in grades 9-12.

An analysis of marijuana use on a monthly basis indicated that Tussey was lower than the State usage in grade 7, but higher in grades 9 and 12. Sixteen percent of Tussey's 9th graders and 19 percent of seniors reported using marijuana monthly, as compared with 8 and 15 percent respectively, across the Common-wealth. Countywide statistics show that Tussey students in grades 9-12 reported the highest percentage of monthly use of marijuana, and there is a high availability of marijuana in the school district.

One percent of the 9th grade and one percent of the 12th grade class reported using cocaine on a monthly basis. Fourteen students in grades 9-12 indicated the use of inhalants once a month.

When asked to indicate the sources for acquiring drugs and alcohol, the most frequent response was friends, followed by out-of-school youth, and adults. When asked to indicate the most frequent location for using drugs and alcohol, the number one response was at a party. Other frequent locations mentioned were at a friend's home, at a hangout, at home, and in a car. A small percentage of students listed school as a location for using drugs and alcohol.

Results pertaining to tobacco use indicate that the percentage of students at Tussey in grade 7 who reported smoking cigarettes monthly was approximately the same as the percentage across the Commonwealth, 17 percent. However, 9th and 12th grade students reported a significantly higher monthly usage of cigarettes (42 and 53 percent respectively) than the State average. Students at Tussey in grade 7, 9, and 12 also reported a significantly higher usage of smokeless tobacco than other students in Pennsylvania. Among Bedford County students, students in grades 9-12 at Tussey reported the highest percentage of monthly use of cigarettes.

An analysis of factors related to drug and alcohol use showed that students at Tussey in grades 9-12 reported the lowest percentage among Bedford County schools who skipped school on a monthly basis. When asked to rate self-confidence and strong family values as factors affecting their decisions about drugs, the students in grades 9-12 at Tussey ranked both factors the lowest of all the county districts.

The district is encouraged by the fact that fewer seventh grade students at Tussey reported an intent and actual monthly usage of alcohol and marijuana as compared with other students across the Commonwealth. One distinct possibility for the lower numbers in grade 7 is that the district began participating in the Drug Resistance Education Program (DARE) for all sixth grade students in 1993-94 and the Pennsylvania Alcohol Awareness Foundation Program in 1993 for all fifth graders. The programs will continue in 1995-96. The drug and alcohol component of the implemented *Growing Healthy* and *Here's Looking At You*, 2000 curriculum in grades K-6 may be attributed to the lower numbers in grade 7. Tussey Mountain is one of the few districts in Intermediate Unit 8 to employ an in-house drug and alcohol facilitator, as well as offer on-site counseling services.

State Comparison

Grade 7

Tussey Mountain students reported the following monthly usage as compared with other Pennsylvania students:

- Less alcohol use
- Less marijuana use
- Approximately the same amount of cigarette use
- A greater amount of smokeless tobacco use
- Less time skipping school.

Grade 9

Tussey Mountain students reported the following monthly usage as compared with other Pennsylvania students:

- Approximately the same amount of alcohol use
- A greater amount of marijuana use
- A greater amount of cigarette use
- A greater amount of smokeless tobacco use
- Less time skipping school.

Grade 12

Tussey Mountain students reported the following monthly usage as compared with other Pennsylvania students:

- Less alcohol use
- A greater amount of marijuana use
- A greater amount of cigarette use
- A greater amount of smokeless use
- Less time skipping school.

Bedford County Comparisons

Grades 9-12

Tussey Mountain students reported the following monthly usage as compared with Bedford County Schools:

- A higher use of alcohol
- A higher use of marijuana
- A higher use of cigarettes
- A higher use of smokeless tobacco
- A lower amount of time skipping school.

Community Drug and Alcohol Advisory Council

Some 50 members of the community and county were invited to participate in the first meeting of the Community Advisory Council on September 10, 1991, at the Tussey Mountain High School Library. The 15 active members established the following mission:

The Tussey Mountain Community Council will act as the coordinator for all drug and alcohol prevention efforts in the Saxton/Tussey Mountain School District. The council will serve as a linkage between home, community, and school and be committed to provide ongoing evaluation of effectiveness of the total prevention program. The assistant superintendent and the drug and alcohol facilitator will serve as chairpersons.

The council meets four times a year or as needed with the membership from county Human Services; the local ministry; civic organizations; parent/teacher organizations; Students Against Drunk Driving Club; Student Assistance Program (Trust); Home Health Nursing Agencies; Broad Top Medical Center Parenting and Teen Pregnancy Prevention Programs; school counselors; and school administrators.

The following are a few activities and programs that have been sponsored by this active council: Chamber of Commerce Breakfast Awareness meeting; Raising Responsible Teens Parent Program; the Fall Ministerium Awareness Breakfast; Home Nursing Teen Mother's Sessions; J.C. Blair Hospital/Broad Top Medical Center Programs—"Just Say No," AIDS Awareness, and 7th Grade Self-Esteem Week; Self-Esteem Support Groups; Mental Health Inservices for Staff and Council; Children's and Adolescent Service System Program (CASSP) Support Programs; Pennsylvania Liquor Control Board (PCLB) bulletin displays; Pennsylvania State Police "Choices" assembly; Route 913 drug and alcohol billboard display; Students Against Drunk Driving (SADD) Prom Promise activities such as White Out Day, Red Ribbon Day, and Elementary Peer Helpers Program; Drug Awareness Resistance Education for sixth graders; and, most recently, the local business Place Mat Project.

Policies and Alternative Placement Options

The school board has written, revised, adapted and approved annually policies on drugs, weapons, harassment, discipline, suicide, and crisis intervention. Most school violations/infractions are referred to the principal, who then makes a referral to an appropriate intervention source (student assistance team, drug and alcohol facilitator, alternative education coordinator for dropout prevention, school counselor, or outside agency representative). Strategies do vary based on the student's problem and needs, family history, previous violations, probation, etc. For the best success of the student, the student assistance team and administrators seek alternative placement either for a time or permanently and work closely with the alternative education program coordinator for dropout prevention.

Alcohol and other drug (AOD) referrals are preassessed by either core members or case managers of the student assistance team and/or the in-house drug and alcohol facilitator. If it is deemed necessary, the preassessment is followed by county agency assessment. Students may be recommended or referred to outside agencies for outpatient counseling, inpatient treatment, or for school-based strategies such as intensive monitoring, support groups, behavioral management, etc., in order to address the student's substance abuse/dependency problem. A drug and alcohol facilitator (Certified Addiction Practitioner) offers support for the students by offering on-site counseling, individual academic monitoring, and support groups.

The following groups are offered once a week during the school year: Chemical Dependency Groups, Children of Alcoholics, Resiliency Life Skills, Behavioral Modification/ Anger Management/Conflict Resolution, and Aftercare/Recovery Groups.

A "venting room" is open to all at-risk students to connect with trained support personnel. This facility is operated by the drug and alcohol facilitator four periods a day, plus after-school sessions. This unique drop-in room is equipped with 13 Macintosh computers and software programs addressing both drug and alcohol and dropout prevention topics, such as "Why Stay In School," "Dealing With Your Teachers," "Drugs and You," "AIDS," "Human Sexuality," "The Solution," "Stress and Anger Management," "Job/ Career Choices," etc. Helpful information is provided to all students using a variety of both visual and audio materials, and a warm, comfortable atmosphere is provided for listening and developing trust between the students and the facilitator. Student violators are also placed in an alternative placement called in-school suspension for a period of from 1 to 3 days depending upon the infraction. This facility is supervised by assigned staff who monitor assignments and behaviors.

Punishment for inappropriate behavior may be extended to an after-school program called "5:45." Student are closely supervised by trained staff members. This form of punishment requests students to stay after the 2:40 bell until 5:45 p.m. Buses are provided to transport all students home. It should be noted that due to a 1994 Dropout Grant from Southern Alleghenies Job Training Inc., the alternative education coordinator for dropout prevention is now able to identify and address some of the problems causing the disciplinary infractions and offer support and/or make appropriate referrals for the recurring 5:45 offenses. Thus far, this strategy has proved very successful.

According to a survey conducted by the dropout coordinator, the primary behavioral factors that caused after-school disciplinary placement were anger, uncontrolled aggressiveness, and impulsiveness coupled with drug/alcohol abuse and family dysfunctions.

21st Century Curriculum

In 1991 the school board adopted two new drug/alcohol programs: *Growing Healthy* (elementary school K-6 grades) and *Here's Looking At You*, 2000 (1st—12th grades). Drug and alcohol education is mandated by the Pennsylvania Department of Education in 1990, Act 211, and is to be taught annually by trained drug and alcohol providers. The curriculum with a "No Use" message has been updated with appropriate revisions to meet student and current societal needs. In-service trainings are done annually by the school-based drug/alcohol facilitator as well as by local county substance abuse specialists.

The following special programs supplement the curriculum: DARE (Drug Awareness Resistance Education) is taught for 15 weeks in all sixth grades with peer helpers from the high school adding information and role modeling; "100 Ways To Enhance Self-Esteem in the Classroom" is offered annually to all seventh graders by the Prevention Coordinator from the Pennsylvania State University Cooperative Extension. Parent seminars, "Raising Responsible Teens," are conducted in the fall via satellite in conjunction with the University of Wisconsin. J.C.Blair Hospital—Broad Top Medical Center Extension teaches "Preventing Teen Pregnancy Program" and choices/abstinence programs for all 8th graders. The student SADD organization actively provides anti-use messages in its Red Ribbon Campaign, Prom Promise, and Whiteout Assembly; "Choice" assembly informs all junior/senior high students on drinking and driving (Pennsylvania State Police Assembly); Voyager Anti-Drug Rock Dance opens Prom Promise Week; and the Pennsylvania Alcohol Awareness Foundation offers a week of information on "Alcoholism, A Family Disease" to supplement the Drug and Alcohol Curriculum in the 5th-, 9th- and 12th-grade health classes.

Conflict resolution is integrated in all 4th, 5th, and 6th grades and 9th and 12th grade health, English, and Problems of Democracy classes. Special support groups called TNT—Teens Needing Teens, sponsored by the Student Assistance Team, address the problem of anger management and behavioral modification.

In 1993-94 the Drug and Alcohol Curriculum (K-12) Project received State funding and purchased 13 new computers with challenging 21st Century software programs. These software activities supplemented the knowledge component of the text and added social skills activities, bonding skills, multimedia activities, desktop publishing, and a plethora of resiliency activities/choices, plus an array of educational games, problem solving activities, puzzles, etc., all aiding in the decisionmaking process and the self-esteem concept. This additional curriculum program has proved to be very successful, and is offered five periods a day with close supervision by the drug and alcohol facilitator.

Intervention Modalities/Therapy

Drug and alcohol offenders at Tussey Mountain School District are identified initially by the Student Assistance Program (Trust)—Tussey Respecting and Understanding Students. Referrals come from administration, staff, probation, local agencies, parents, self, and peers to a core team consisting of 12 members. All core team members are trained by the Pennsylvania Department of Education for 1 week in a variety of areas relating to substance abuse, depression, and mental health. The team's purpose is to identify and refer students to appropriate sources for intervention and/or treatment. The team meets for 80 minutes a week and has been active since 1988. Parents, students, and staff members receive inservice training annually by designated trainers.

At-risk youth also receive school-based support from an in-house drug and alcohol facilitator and local drug and alcohol representative from the Bedford County drug and alcohol agencies. Onsite outpatient counseling, substance abuse support groups, aftercare/relapse groups, self-esteem, conflict resolution, and anger management groups are offered throughout the year. The alternative education coordinator for dropout prevention closely monitors the student's academic progress and behavioral improvements. This program has been in operation for 5 years.

The drop-in room at Tussey Mountain High School provides a safe environment for students to discuss their drug and alcohol and related problems with a trained drug and alcohol facilitator. Counseling is done one-to-one and/or in a group setting. Drug and alcohol peer helpers have been trained, and recovery students also participate in the support program. This special service provides crisis intervention, followup on disciplinary infractions from administration, school-based counseling to deal with family and/or individual drug/alcohol issues, and referrals to outside agencies or the Student Assistance Program.

A trained addiction/prevention practitioner coordinates the facility and serves as a member of the Student Assistance Program, which works closely with the at-risk population. In addition, the drop-in room attempts to reinforce classroom prevention techniques, provides *immediate* intervention as a tool for enforcing troubled students to look at their behavior without the mask of denial, offers a listening service to help students, and identifies problems that interfere with academic process by exploring the reality of the problem in order to seek solutions. Problem solving techniques, anger management, peer mediation, and conflict resolution and resiliency skills are techniques used to address violence and disciplinary and drug/alcohol problems. The students arrange convenient times for individual sessions during study halls or after school. Services are available daily for five periods with after-school hours available on request.

We are proud to report that the facility has proved extremely successful. There has been a significant decrease in disciplinary referrals and a significant decrease in the dropout rate from 5.5 percent in 1987-88 to 1.3 percent in 1993-94 and 2.1 percent in 1994-95.

Law Enforcement

Tussey Mountain School District works closely with the local magistrate, police authorities, and the Bedford/Huntingdon county probation officer. Students who are on probation are closely monitored by the drug and alcohol facilitator and the juvenile probation officer. Random drug testing can be performed upon request. The Pennsylvania State Police provide an outstanding assembly entitled "Choices" to 7th-12th graders annually and conduct a classroom presentation,

"Drinking and Driving," to all 10th-grade students in the driver's education classes. The Pennsylvania Liquor Control Board provides displays and distributes literature to all classrooms.

Year	High School enrollment	Dropout	Percentage	
1984-85	855	17	2.0	
1985-86	834	35	4.2	
1986-87	779	32	4.1	
1987-88	740	41	5.5	
1988-89	639	17	2.7	
1989-90	647	17	2.6	
1990-91	584	21	3.6	
1991-92	652	14	2.1	
1992-93	620	12	1.9	
1993-94	610	8	1.3	
1994-95	668	14	2.1	

For two years the Tussey school district, via a Pennsylvania drug and alcohol mini- grant, adopted the DARE Program—Drug and Alcohol Resistance Education Program—for all sixth grade students. A 15-week instructional program is taught by a trained Pennsylvania police officer. This enlightening program supplemented the drug/alcohol curriculum, Growing Healthy, in the sixth grade. Eight trained peer helpers from the high school student SADD organization serve as role models visiting classrooms throughout the 15 weeks in which role playing, small group sessions, open forums, and panel discussion are held. We have observed a significant decrease in the intent to use among the junior high school population (PPAAUS Survey 1994) and attribute this to the effectiveness of the DARE Program.

Educating Staff, Parents, and Students

According to Act 211, the Pennsylvania Department of Education requires that all drug and alcohol providers be trained and given inservice training annually. Tussey Mountain's drug and alcohol facilitator performs all inservice training and workshops to some 50 elementary drug and alcohol teachers and 4 junior/senior high school providers.

Curriculum components—knowledge, and social and bonding skills—are updated in the spring of each year with additional materials added to the library for teacher use. The video series, "Choices" by Michael Crichton, and Body Awareness Resistance Network software are reviewed and also updated yearly.

All staff and faculty receive annual inservice training from the Student Assistance Core Team members and local county drug/alcohol specialists relating to the identification and referral process and to all current AOD information. Student and parent handbooks are distributed at the beginning of each school year, and newsletters are sent to parents about school activities and projects. Parents are also invited by all health providers to participate in the drug education classes.

Thus, through implementation/ review and update/intervention, the drug/alcohol support programs that have been successful over the past 5 years are highlighted as follows:

- Community/School Drug and Alcohol Advisory Council
- Student Assistance Program—(Trust)
- Comprehensive K-12 Tobacco, Alcohol, and Other Drugs Curriculum (TOAD)
- Drug and Alcohol School-based Facilitator
- A Drop-In Room
- Drug Alcohol Resistance Education (D.A.R.E.)
- Teen Parenting/Pregnancy Program
- Alternative Education for Dropout Prevention Program
- Chemical Dependency Support Groups
- Aftercare Support Group/Relapse Prevention
- Multi-Risk Teens Needing Teens Support
- Students Against Drunk Driving (SADD)
- Instructional Support Team
- On-Site Counseling
- Seventh Grade Self-Esteem Classes
- Parent Awareness Programs
- Staff Awareness Inservice Training
- Intensive Mentoring

Top Seven Recommendations

- 1. Continue the activities and projects of the Drug and Alcohol Community Advisory Council.
- 2. Review the drug/alcohol education curriculum annually for developmental and sequential appropriateness. Provide inservice training to all drug/alcohol providers annually.
- 3. Implement community mobilization projects designed for local businesses, local police, juvenile probation systems, media campaigns, and after-school activities.

- 4. Implement a social skills course for all sixth and seventh graders with emphasis on conflict resolution, peer mediation, and anger management.
- 5. Annually review the safe-school violence/weapons policy, drug/ alcohol policy, suicide and crisis intervention policies.
- 6. Continue with the existing drug/alcohol programs for the 1996-97 school year.
- 7. Continue to employ an in-house drug/alcohol facilitator as a consultant and coordinator for all drug/alcohol programming.

Sprague A4K: An Approach to Rural Substance Abuse, Crime, and Intergenerational Problems

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Abstract

A small rural community in eastern Washington, alarmed by substance abuse, vandalism, and intergenerational distance, formed a group called A4K, which stands for "Adults for Kids." A4K offers personal adult involvement and healthy alternative recreational activities for teens. Other communities in the county have adopted the A4K name and have also begun to promote substance-free and intergenerational activities.

Sprague is a community of just under 500 located in eastern Washington. The nearest town with any services is 24 miles away. There are no businesses open after 8 o'clock at night and no places of entertainment (video games, movies, bowling, etc.) at all. Due to the lack of entertainment, many young people resorted to mischievous forms of entertainment, causing vandalism, crime, and substance-related incidents to escalate. With nothing else to do, the pressure to join the party scene became extreme for many young people. Many commented that they often went to parties even though they did not drink or do drugs just so they could be with the rest of the kids. Not only did this situation have a detrimental effect on the youth of Sprague, but these activities also caused increased intergenerational problems. The elderly were intimidated and afraid to leave their homes, and other members of the community were fed up with the destruction and bad attitudes. Because the resulting conflict involved not just a group of teenagers, but an entire community, a solution needed to be reached as a community.

A group of adults met to see if there was something they could do to make a difference in what was happening to our community and young people. The group was concerned with the levels of vandalism in our homes and public parks and the unhealthy climate our senior citizens were feeling due to intimidation. They were also concerned with the rising levels of drug and alcohol use and the exposure to vandalism, gangs, and substance abuse that non-using kids were subjected to because there were no alternatives.

Methods

The group met with parents and concerned citizens to identify problem areas and peak times of trouble. They met with youth specialists from schools, drug and counseling agencies, and other youth organizations to do research on alternatives. From the Lincoln County Alcohol and Drug Center Survey, which utilized the DASA Risk Factor

Indicator, we inferred that the continued attitude that alcohol was not a drug and just a part of growing up, that alcohol was easily accessible in the county, and that students in schools where the teachers live in the community and take a direct interest in their lives all directly affected the attitude of our teens. The group also met with the kids to find out what kind of activities they would like, whom they would like to be there, and to gain other insights.

The school principal at the time was also the leadership trainer for the Bi-County Associated Student Body Representatives Training Camp and volunteered considerable amounts of information on games and activities that were fun but had underlying messages of trust, leadership, and friendship. The county alcohol and drug agency donated books and pamphlets on planning substance free parties like *Celebrate Smart* put out by the National Federation of State High School Associations and the National Association of Broadcasters. They offered information such as how to get started, how to raise support, and how to maximize success among students and adults. The emphasis was on being organized and keeping good records for ongoing efforts.

The group reached the conclusion that a great deal of the problems encountered were caused by a lack of personal adult involvement and healthy alternative activities. In response to that, we formed a group called A4K. The letters represent "Adults For Kids." A4K is a special interest approach to rural substance abuse, rural gangs, crime and violence, and intergenerational problems. The purpose of A4K is to take the stand that drinking, drugs, and malicious mischief are wrong, and to provide positive role models and entertainment alternatives. A4K began hosting positive monthly activities for the high school kids, often meeting immediately after a school sports games, as this was identified a peak party and substance usage time.

A4K called the activities "5th Quarter," since they followed the end of the game. Some of the activities included self-reliance and leadership games, mystery dinners, relay races, pizza with beach ball volleyball, open gym nights, bingo and other games of chance, big screen movie nights, and board game nights. They all featured lots of snacks and soft drinks, loud music, and door prizes awarded at the end of the night that kids had to be present to win. Rules for 5th Quarter were that music had to be previewed, if the kids left they could not come back, and no inappropriate language or actions would be tolerated. Attendance runs about 75 percent of the high school student body with the pressure of presence changing from the party goers to those kids attending 5th Quarter. Many of the teens found they could have a great time while influencing their errant friends to join them. Some even formed a club, proudly wearing their T-shirts emblazoned with "Straight Is Great." To join the club, the kids had to sign a contract that they were substance free.

Historically, graduation night has been the occasion for a big beer party that everyone in the high school is expected to attend. In an effort to offer yet another alternative, A4K started Grad Nite Parties, beginning right after graduation and running until 2 a.m. The parties have a D.J., contests like the limbo, a movie room, table tennis, volleyball, and basketball. The kids get a multitude of prizes ranging from free fast food coupons and tapes or CDs to stereos, cameras, and a television. The whole night is free except for a car raffle that costs \$1 to enter. All the high school and their guests up to age 21 are invited to encourage attendance. Attendance has been running from 85 to 90 percent of the student body.

Originally all parents of high school students were mailed letters and an article was published in the local newspaper to request their attendance at our first meetings. Once the group was formed, letters were sent to all businesses and residents of the community requesting financial and physical support. Including the Grad Nite Party supplies and prizes, which account for about 80 percent of the budget, the group works with about \$3,000 a year that comes entirely from donations. Those donations are acquired by personal contact of community members or door-to-door solicitation of businesses. A4K has followed up with thanks and positive publicity for all who support the program. Once the program was established, A4K met every few months to set up a schedule for the next several months. The fewer the meetings the better, as all the members were volunteers with busy schedules. When games or contests were held, adults were asked to participate as well. Friendships were formed between individuals that resulted in firm bonds when adult support was needed.

As the community program grew, news about the program spread throughout the county. Other communities adopted the A4K name and began to promote substance-free and intergenerational activities. It became evident that there are adults who care about kids; that there are alternatives to negative behavior if you look hard enough; and that the strength of community support is the backbone of rural America. Attitudes have begun changing in our community, and while it is an ongoing struggle complicated by a continued influx of low income families into our communities, we are making progress.

Problems Encountered

By our community's creating A4K, not only did we isolate a problem that the community was having, we also went a long way toward solving it. However, as with any complex issue, further difficulties often present themselves. One of the largest problems we have encountered is generating enough volunteers to work at the events. With our small population (high school enrollment is 55 students, a large percentage of whom are from single parent or low income homes), many of the parents do not have the time or may not wish to give their time providing activities for the kids. Of the other parents, the general consensus is they do not want to be involved so their child will not be inhibited by their presence. Many of these people who do not participate directly will give money or supplies.

A core group of six to eight people does most of the work of A4K. Depending on the activity, sometimes this is enough and sometimes it is not. Grad Nite takes at least a dozen adults because there are so many activities involved and usually over 50 kids are in attendance. One of the best solutions we have found is to get people without high school kids involved. Young marrieds or empty nest adults are ideal because they have more time and energy. The other solution is to communicate well with the nonparticipating parents. If they are notified that an activity will be canceled if there are not enough adults, some people will make an extra effort.

The other major barrier we started with was lack of funds. Our solution to that was good communication, promotion, and one-on-one requests of businesses and community members. Personal mailings to individuals who have or have had kids in our community resulted in enough money to begin the program. Once activities began, we took pictures and had articles printed in the local newspaper letting the public know about the good, clean fun the kids were having. When those same people who were intimidated or frustrated saw that fewer kids were out raising havoc on the streets because of our

program, more donations began to come in. Another solution to our lack of funds came when repeat requests for contributions were considered because of the appreciation and promotion we did for contributors. Personal thank you notes were signed by the kids at 5th Quarter activities. Posters at the high school and publicity articles in the paper thanked supporters, individually listing their names. We also asked the kids and their parents to mention to the businesses when they were in shopping or out for dinner that they appreciated their support. Each year our program has been able to grow a little more because of increased donations.

Conclusions

Personal involvement creates a healthier environment. Many adults in our community feel better about our young people because they now know them personally and spend time with them. And the young people feel better, and generally behave better, when they know that people care. We have discovered that community support of projects can determine their success or failure. The same happens with vandalism and substance abuse problems. When the adults joined together to show their support, the kids reacted by forming bonds. When the adults took a stand against negative actions, even if it was just to join ranks to observe misbehavior, the kids felt accountability, because they knew these same people had come out to support them.

Our intergenerational problems have also been improved by these same actions. When kids would not move out of the middle of the street or acknowledge the elderly with a wave when meeting, our senior citizens felt the kids lacked respect. So the next time they met, the senior citizens would not acknowledge them and the kids felt slighted. This continued until the kids felt belligerent and the seniors felt intimidated. Programs that get kids involved working side by side with seniors help them get to know one another, and they get back to treating one another as individuals, not as generations. This results in friendships across the ages and positive community relations. A4K has tried to promote this by getting seniors to help at activities and getting kids to volunteer to help seniors with chores. Again, we can make great strides in the social problems of our era by getting people personally involved, sharing our heritages and experiences, and truly caring what happens to our neighbors.

Recommendations

Rural America is definitely feeling the swell of the increase of gangs, violence, and substance abuse. The solution can be in our own hands if we are willing to work at it. We do not have to have big budgets or paid staff to make a difference. We can help our rural communities continue to produce healthy young Americans who know about values, caring, and giving. It just takes some personal involvement, a little time, and a willingness to show we care enough to act—these are many of the same morals, ethics, and sense of commitment that our ancestors used when settling rural America. The promotion of returning to our roots by increasing community-based support groups and activities could result in turning the tide back to a rural America we all know and love.

References

DASA *County Plan*. Lincoln County Alcohol & Drug Center. pp. 1-2. *Celebrate Smart*. National Federation of State High School Associations and National Association of Broadcasters, 1987. pp. 1-15.